

=> FILE REG

FILE 'REGISTRY' ENTERED AT 15:00:25 ON 26 OCT 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2004 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 25 OCT 2004 HIGHEST RN 769101-30-6
DICTIONARY FILE UPDATES: 25 OCT 2004 HIGHEST RN 769101-30-6

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> FILE HCAPLUS

FILE 'HCAPLUS' ENTERED AT 15:00:30 ON 26 OCT 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

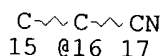
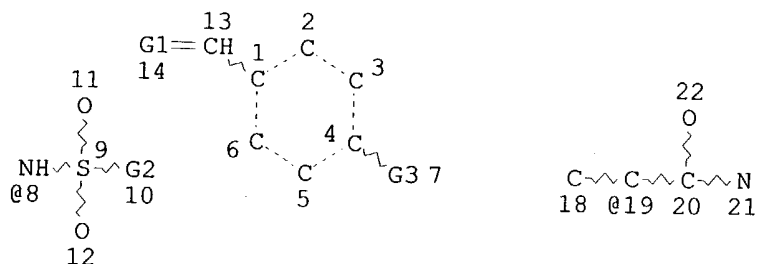
Copyright of the articles to which records in this database refer is
held by the publishers listed in the PUBLISHER (PB) field (available
for records published or updated in Chemical Abstracts after December
26, 1996), unless otherwise indicated in the original publications.
The CA Lexicon is the copyrighted intellectual property of the
the American Chemical Society and is provided to assist you in searching
databases on STN. Any dissemination, distribution, copying, or storing
of this information, without the prior written consent of CAS, is
strictly prohibited.

FILE COVERS 1907 - 26 Oct 2004 VOL 141 ISS 18
FILE LAST UPDATED: 25 Oct 2004 (20041025/ED)

This file contains CAS Registry Numbers for easy and accurate
substance identification.

=> D QUE L76

L63	SCR 1015
L68	SCR 29 OR 41
L70	STR



13,703 structures from this
query

VAR G1=16/19/CY
VAR G2=AK/CY
VAR G3=OH/8
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 22

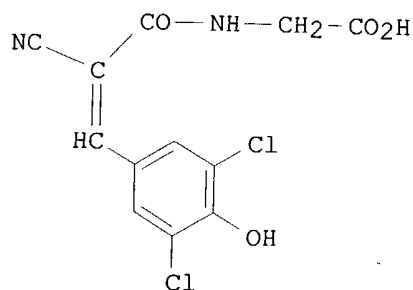
STEREO ATTRIBUTES: NONE

L72 SCR 1788 OR 1700
L74 13703 SEA FILE=REGISTRY SSS FUL L70 AND L63 AND L68 AND L72
L75 3915 SEA FILE=HCAPLUS ABB=ON L74
L76 18 SEA FILE=HCAPLUS ABB=ON L75(L) (HAIR OR KERAT?)

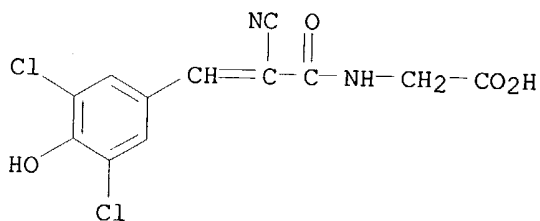
=> D L76 BIB ABS IND HITSTR 1-18

L76 ANSWER 1 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2004:781935 HCAPLUS
DN 141:282410
TI Hair dye compositions containing direct dyes having dissociating groups
IN Kawagishi, Toshio; Dominic, Pratt
PA Kao Corp., Japan; Fuji Photo Film Co., Ltd.
SO Jpn. Kokai Tokkyo Koho, 38 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

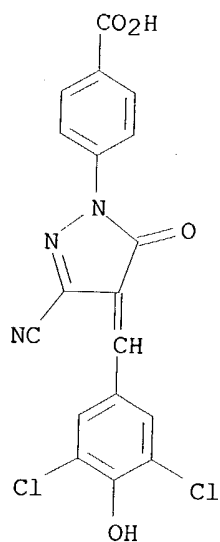
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004262888	A2	20040924	JP 2003-56768	20030304
JP 2003-56768		20030304		



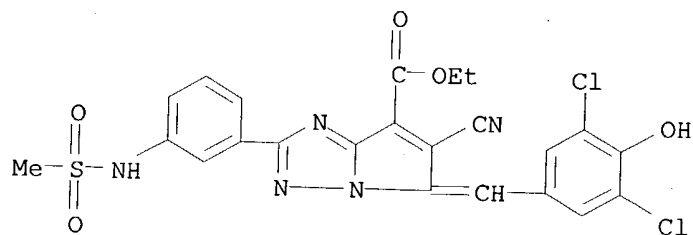
- AB The hair dye compns. contain direct dyes DYE-(L)n-DIS (DYE = residue of dye having dissociating H atom in chromophore and maximum absorption at 400-700 nm in dissociated state; L = divalent linking group; n = 0, 1, 2; DIS = dissociating group). Goat hair was dyed well with a hair dye foam composition (pH 8.5) containing a direct dye I 0.5, monoethanolamine 1, EtOH 15, propylene glycol 10, polyoxyethylene octyldodecyl ether 10, polyoxyethylene tridecyl ether 9, oleic acid diethanolamide 8, oleyl alc. 2, NH₄Cl, LPG 10, and H₂O to 100 weight% showed good color fastness to shampooing.
- IC ICM A61K007-13
- CC 62-3 (Essential Oils and Cosmetics)
- ST hair direct dye color fastness
- IT Dyes
(direct; hair dye compns. containing direct dyes having dissociating groups)
- IT Hair preparations
(dyes; hair dye compns. containing direct dyes having dissociating groups)
- IT **760191-15-9 760191-16-0 760191-17-1**
760191-18-2 760191-19-3 760191-20-6 760191-21-7
 760191-22-8 760191-23-9 760191-24-0 760191-25-1 760191-26-2
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (hair dye compns. containing direct dyes having dissociating groups)
- IT **760191-15-9 760191-16-0 760191-18-2**
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (hair dye compns. containing direct dyes having dissociating groups)
- RN 760191-15-9 HCAPLUS
- CN Glycine, N-[2-cyano-3-(3,5-dichloro-4-hydroxyphenyl)-1-oxo-2-propenyl]-
 (9CI) (CA INDEX NAME)



- RN 760191-16-0 HCAPLUS
- CN Benzoic acid, 4-[3-cyano-4-[(3,5-dichloro-4-hydroxyphenyl)methylene]-4,5-dihydro-5-oxo-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)



RN 760191-18-2 HCAPLUS
 CN 5H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-5-[(3,5-dichloro-4-hydroxyphenyl)methylene]-2-[3-[(methylsulfonyl)amino]phenyl]-, ethyl ester (9CI) (CA INDEX NAME)



L76 ANSWER 2 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 2004:549442 HCAPLUS
 DN 141:93976
 TI Oxidative hair dyes composed of primary amino group-containing chromophores and reactive carbonyl compounds
 IN Moeller, Hinrich; Hoeffkes, Horst; Oberkobusch, Doris
 PA Henkel Kgaa, Germany
 SO Ger. Offen., 39 pp.
 CODEN: GWXXBX
 DT Patent
 LA German
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 10260881	A1	20040708	DE 2002-10260881	20021223
	WO 2004058200	A1	20040715	WO 2003-EP13812	20031206
	W: JP				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR				

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

PRAI DE 2002-10260881 A 20021223

OS MARPAT 141:93976

AB The invention concerns oxidative hair dyes that are composed of (A) primary amino group-containing chromophores that adsorb at 350-750 nm; (B) reactive carbonyl compds.; (C) optionally CH-acidic group-containing compds., primary and secondary amines, hydroxyl compds. Direct dyes, color enhancers and surfactants can be added. Thus in a hair dyeing experiment 5 mmol 4-amino-4'-dimethylaminostilbene and 5 mmol glutacon aldehyde sodium salt were mixed with 5 mmol sodium acetate, one drop of 25% fatty alkyl sulfate solution and 50 mL water; pH was set to 6; a rusty red color was obtained.

IC ICM A61K007-13

ICS D06P003-10; D06P003-14; D06P003-30

CC 62-3 (Essential Oils and Cosmetics)

ST oxidative hair dye amino group chromophore reactive carbonyl compd

IT Acids, biological studies

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(CH-acids; oxidative hair dyes composed of primary amino group-containing chromophores and reactive carbonyl compds.)

IT Surfactants

(anionic; oxidative hair dyes composed of primary amino group-containing chromophores and reactive carbonyl compds.)

IT Dyes

(direct; oxidative hair dyes composed of primary amino group-containing chromophores and reactive carbonyl compds.)

IT Hair preparations

(dyes, oxidative; oxidative hair dyes composed of primary amino group-containing chromophores and reactive carbonyl compds.)

IT Flavonoids

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(dyes; oxidative hair dyes composed of primary amino group-containing chromophores and reactive carbonyl compds.)

IT Surfactants

(nonionic; oxidative hair dyes composed of primary amino group-containing chromophores and reactive carbonyl compds.)

IT Amino group

Anthraquinone dyes

Azo dyes

Chromophores

Cyanine dyes

Optical absorption

Oxidizing agents

Wavelength

(oxidative hair dyes composed of primary amino group-containing chromophores and reactive carbonyl compds.)

IT Bromides, biological studies

Carbonyl compounds (organic), biological studies

Chlorides, biological studies

Iodides, biological studies

Perchlorates

Sulfates, biological studies

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(oxidative hair dyes composed of primary amino group-containing chromophores and reactive carbonyl compds.)

IT Amines, biological studies

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(primary; oxidative hair dyes composed of primary amino group-containing chromophores and reactive carbonyl compds.)

IT Amines, biological studies

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (secondary; oxidative hair dyes composed of primary amino group-containing chromophores and reactive carbonyl compds.)

IT Surfactants
 (zwitterionic; oxidative hair dyes composed of primary amino group-containing chromophores and reactive carbonyl compds.)

IT 519-73-3D, Triphenyl methane, derivs.
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (dyes; oxidative hair dyes composed of primary amino group-containing chromophores and reactive carbonyl compds.)

IT 62-53-3, Aniline, biological studies 66-72-8, Pyridoxal 67-52-7, Barbituric acid 70-70-2 71-00-1, L-Histidine, biological studies 74-79-3, L-Arginine, biological studies 75-75-2D, Methanesulfonic acid, salt 75-93-4D, Methylsulfuric acid, salt 81-93-6, Phenosafranine 82-28-0, C.I. 60700 83-33-0, 1-Indanone 84-83-3, 2-Formylmethylene-1,3,3-trimethylindoline 86-40-8, 3,6-Diamino-10-methylacridinium chloride 86-51-1, 2,3-Dimethoxybenzaldehyde 87-02-5, 7-Amino-4-hydroxynaphthalene-2-sulfonic acid 88-21-1, 2-Aminobenzene sulfonic acid 88-74-4, 2-Nitroaniline 89-25-8, 1-Phenyl-3-methylpyrazol-5-one 89-57-6, 5-Aminosalicylic acid 89-84-9 90-02-8, Salicylaldehyde, biological studies 90-20-0, 4-Amino-5-hydroxynaphthalene-2,7-disulfonic acid 90-44-8, Anthrone 91-29-2, 4'-Amino-4-nitrodiphenylamine-2-sulfonic acid 91-56-5, Isatin 91-95-2, 3,3',4,4'-Tetraaminodiphenyl 92-65-9, N-(2-Hydroxyethyl)-N-ethyl-p-phenylenediamine 93-02-7, 2,5-Dimethoxybenzaldehyde 93-05-0, N,N-Diethyl-p-phenylenediamine 93-55-0, Propiophenone 95-01-2, 2,4-Dihydroxybenzaldehyde 95-54-5, o-Phenylenediamine, biological studies 95-55-6, 2-Aminophenol 95-70-5, 2,5-Diaminotoluene 96-91-3, Picramic acid 96-93-5, 3-Amino-4-hydroxy-5-nitrobenzene sulfonic acid 97-51-8, 2-Hydroxy-5-nitrobenzaldehyde 98-01-1, Furfural, biological studies 98-11-3D, Benzene sulfonic acid, salt 98-37-3, 3-Amino-4-hydroxybenzene sulfonic acid 98-79-3, Pyrrolidone-5-carboxylic acid 98-86-2, Acetophenone, biological studies 99-05-8, 3-Aminobenzoic acid 99-07-0 99-31-0, 5-Aminoisophthalic acid 99-56-9, 1,2-Diamino-4-nitrobenzene 99-61-6, 3-Nitrobenzaldehyde 99-92-3 99-93-4, 4-Hydroxyacetophenone 99-98-9, N,N-Dimethyl-p-phenylenediamine 100-01-6, 4-Nitroaniline, biological studies 100-10-7, 4-Dimethylaminobenzaldehyde 100-83-4, 3-Hydroxybenzaldehyde 101-77-9, 4,4'-Diaminodiphenylmethane 101-80-4, 4,4'-Diaminodiphenyl ether 104-15-4D, p-Toluene sulfonic acid, salt 106-50-3, p-Phenylenediamine, biological studies 108-45-2, m-Phenylenediamine, biological studies 108-72-5, 1,3,5-Triaminobenzene 109-00-2, 3-Hydroxypyridine 110-85-0, Piperazine, biological studies 110-86-1, Pyridine, biological studies 110-89-4, Piperidine, biological studies 116-63-2 117-39-5, Quercetin 118-12-7 118-70-7, 4,5,6-Triaminopyrimidine 118-92-3, 2-Aminobenzoic acid 118-93-4 119-34-6, 4-Amino-2-nitrophenol 119-59-5, 4,4'-Diaminodiphenylsulfoxide 119-61-9, Benzophenone, biological studies 119-70-0, 4,4'-Diaminodiphenylamine-2-sulfonic acid 120-14-9, 3,4-Dimethoxybenzaldehyde 120-21-8, 4-Diethylaminobenzaldehyde 120-46-7, 2-Benzoylacetophenone 120-57-0, Piperonal 120-72-9D, Indole, derivs. 121-32-4, 3-Ethoxy-4-hydroxybenzaldehyde 121-33-5, Vanillin 121-47-1, 3-Aminobenzene sulfonic acid 121-57-3, 4-Aminobenzene sulfonic acid 121-71-1 122-57-6 123-08-0, 4-Hydroxybenzaldehyde 123-11-5, 4-Methoxybenzaldehyde, biological studies 123-30-8, 4-Aminophenol 123-75-1, Pyrrolidine, biological studies 126-81-8, 5,5-Dimethylcyclohexane-1,3-dione 128-95-0, 1,4-Diaminoanthraquinone 131-22-6, α -Naphthyl red 131-56-6, 2,4-Dihydroxybenzophenone 134-96-3, 4-Hydroxy-3,5-dimethoxybenzaldehyde 135-02-4, 2-Methoxybenzaldehyde 139-65-1, 4,4'-Diaminodiphenylsulfide 139-85-5,

3,4-Dihydroxybenzaldehyde 141-84-4, Rhodanine 141-86-6,
 2,6-Diaminopyridine 142-08-5, 2-Hydroxypyridine 147-85-3, L-Proline,
 biological studies 150-13-0, 4-Aminobenzoic acid 150-75-4,
 4-Methylaminophenol 156-81-0, 2,4-Diaminopyrimidine 288-13-1, Pyrazole
 288-32-4, Imidazole, biological studies 288-88-0, 1H-1,2,4-Triazole
 326-91-0 350-03-8 387-46-2, 2,6-Dihydroxybenzaldehyde 452-58-4,
 2,3-Diaminopyridine 458-36-6, Coniferylaldehyde 477-73-6 480-66-0
 486-25-9, 9-Fluorenone 487-70-7, 2,4,6-Trihydroxybenzaldehyde
 487-89-8, 1H-Indole-3-carboxaldehyde 490-78-8 491-38-3, Chromone
 491-67-8, 5,6,7-Trihydroxyflavone 496-15-1D, Indoline, derivs.
 498-02-2 498-94-2, Piperidine-4-carboxylic acid 498-95-3,
 Piperidine-3-carboxylic acid 500-22-1, 3-Pyridinecarboxaldehyde
 504-17-6, Thiobarbituric acid 504-24-5, 4-Aminopyridine 520-36-5,
 4',5,7-Trihydroxyflavone 525-82-6, Flavone 528-21-2 528-75-6,
 2,4-Dinitrobenzaldehyde 531-53-3, Azur A 531-57-7, Azure C 532-82-1,
 C.I. 11270 533-31-3, 3,4-Methylenedioxyphenol 535-75-1,
 Piperidine-2-carboxylic acid 535-87-5, 3,5-Diaminobenzoic acid
 537-65-5, 4,4'-Diaminodiphenylamine 539-17-3 548-83-4,
 3,5,7-Trihydroxyflavone 552-89-6, 2-Nitrobenzaldehyde 553-24-2,
 Neutral red 555-16-8, 4-Nitrobenzaldehyde, biological studies
 569-61-9, C.I. 42500 570-24-1, 6-Nitro-o-toluidine 574-19-6 577-56-0
 577-85-5, 3-Hydroxyflavone 578-66-5, 8-Aminoquinoline 579-72-6,
 2-Dimethylaminobenzaldehyde 580-17-6, 3-Aminoquinoline 580-22-3,
 2-Aminoquinoline 581-64-6, C.I. 52000 586-89-0 591-27-5,
 3-Aminophenol 591-31-1, 3-Methoxybenzaldehyde 603-81-6,
 2,3-Diaminobenzoic acid 605-59-4, 1-Ethyl-4-methylquinolinium iodide
 606-23-5, 1H-Indene-1,3(2H)-dione 606-31-5, 2,6-Dinitrobenzaldehyde
 606-55-3, 1-Ethyl-2-methylquinolinium iodide 606-57-5,
 2-Amino-1-nitronaphthalene 608-97-9, Pentaaminobenzene 610-74-2,
 2,5-Diaminobenzoic acid 610-81-1, 4-Amino-3-nitrophenol 610-99-1
 611-03-0, 2,4-Diaminobenzoic acid 611-09-6, 5-Nitroisatin 611-98-3,
 4,4'-Diaminobenzophenone 611-99-4, 4,4'-Dihydroxybenzophenone
 613-45-6, 2,4-Dimethoxybenzaldehyde 613-69-4, 2-Ethoxybenzaldehyde
 614-16-4, Benzoylacetonitrile 615-66-7, 2-Chloro-p-phenylenediamine
 615-71-4, 1,2,4-Triaminobenzene 616-45-5, Pyrrolidone 616-47-7,
 1-Methylimidazole 619-05-6, 3,4-Diaminobenzoic acid 621-59-0,
 3-Hydroxy-4-methoxybenzaldehyde 623-30-3 626-64-2, 4-Hydroxypyridine
 632-99-5, Basic Violet 14 636-25-9, 2,5-Diaminophenol 673-22-3,
 2-Hydroxy-4-methoxybenzaldehyde 698-63-5, 5-Nitrofurfural, biological
 studies 699-83-2 703-80-0 704-13-2, 3-Hydroxy-4-nitrobenzaldehyde
 708-06-5, 2-Hydroxy-1-naphthaldehyde 711-79-5 712-97-0,
 6-Nitropiperonal 779-90-8, 1,3,5-Triacetylbenzene 821-42-1,
 2-Pentenedial 830-74-0, 1-Allylisatin 830-79-5, 2,4,6-
 Trimethoxybenzaldehyde 832-58-6, 2,4,6-Trimethoxyacetophenone
 872-85-5, 4-Pyridinecarboxaldehyde 873-74-5, 4-Aminobenzonitrile
 876-87-9, 1,2-Dimethylquinolinium iodide 932-16-1 934-22-5,
 5-Aminobenzimidazole 943-88-4 950-81-2 1004-74-6,
 2,4,5,6-Tetraaminopyrimidine 1004-75-7, 4-Hydroxy-2,5,6-
 triaminopyrimidine 1009-61-6, 1,4-Diacetylbenzene 1080-12-2
 1080-74-6 1081-48-7 1121-60-4, 2-Pyridinecarboxaldehyde 1122-54-9
 1122-62-9 1123-55-3, 7-Aminobenzothiazole 1123-93-9,
 5-Aminobenzothiazole 1125-60-6, 5-Aminoisoquinoline 1136-86-3
 1137-42-4, 4-Hydroxybenzophenone 1143-38-0, 1,8-Dihydroxyanthrone
 1143-72-2, 2,3,4-Trihydroxybenzophenone 1192-58-1 1194-98-5,
 2,5-Dihydroxybenzaldehyde 1197-55-3, 4-Aminophenylacetic acid
 1199-59-3, 4-Dimethylamino-2-methylbenzaldehyde 1204-86-0,
 4-Morpholinobenzaldehyde 1424-66-4, 2-Chloro-4-dimethylaminobenzaldehyde
 1450-75-5 1455-77-2, 3,5-Diamino-1,2,4-triazole 1466-88-2 1470-79-7,
 2,4,4'-Trihydroxybenzophenone 1483-97-2, 3,6-Diacetyl-9-ethylcarbazole

1484-05-5, 3-Acetyl-9-methylcarbazole 1484-05-5D, salt 1493-13-6D,
 Trifluoromethane sulfonic acid, salt 1504-76-3 1571-72-8,
 3-Amino-4-hydroxybenzoic acid 1681-60-3, Pontacylviolet 4BSN 1734-79-8
 1820-80-0, 3-Aminopyrazole 1874-22-2

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (oxidative hair dyes composed of primary amino group-containing
 chromophores and reactive carbonyl compds.)

IT 1971-81-9, 4-Dimethylamino-1-naphthaldehyde 2058-74-4, 1-Methylisatin
 2089-78-3 2103-57-3, 2,3,4-Trimethoxybenzaldehyde 2118-39-0, C.I.
 27755 2124-31-4 2144-08-3, 2,3,4-Trihydroxybenzaldehyde 2233-18-3,
 4-Hydroxy-3,5-dimethylbenzaldehyde 2291-40-9 2374-03-0,
 4-Amino-3-hydroxybenzoic acid 2390-56-9 2478-38-8 2539-53-9,
 4-Ethoxy-3-hydroxybenzaldehyde 2654-52-6, 2,3-Dimethylbenzothiazolium-p-
 toluenesulfonate 2688-48-4 2688-49-5 2785-06-0, 2,3-
 Dimethylbenzothiazolium iodide 2835-77-0, 2-Aminobenzophenone
 2835-95-2, 2-Methyl-5-aminophenol 2835-98-5 2835-99-6,
 4-Amino-3-methylphenol 2871-01-4 2872-48-2, 1,4-Diamino-2-
 methoxyanthraquinone 2887-61-8, 2-Hydroxybutyrophenone 3011-34-5,
 4-Hydroxy-3-nitrobenzaldehyde 3119-93-5, 3-Ethyl-2-methylbenzothiazolium
 iodide 3131-52-0, 5,6-Dihydroxyindole 3158-63-2, 1,3-
 Dimethylthiobarbituric acid 3160-35-8 3160-37-0 3167-49-5,
 6-Aminonicotinic acid 3204-61-3, 1,2,4,5-Tetraaminobenzene 3215-37-0,
 3-Acetylcarbazole 3240-72-0, 2,4-Dihydroxy-5,6-diaminopyrimidine
 3244-88-0, Benzenesulfonic acid, 2-amino-5-[(4-amino-3-sulfo-2,5-cyclohexadien-1-ylidene)methyl]-3-methyl-, disodium salt
 3248-91-7, C.I. 42520 3342-78-7, 2-Aminophenylacetic acid 3392-97-0,
 2,6-Dimethoxybenzaldehyde 3433-54-3, 6-Nitroisatin 3565-42-2,
 Quinisatin 3567-66-6, C.I. 17200 4181-05-9, 4-
 Diphenylaminobenzaldehyde 4318-76-7, 2,5-Diaminopyridine 4331-29-7,
 7-Aminobenzimidazole 4335-90-4 4363-93-3, 4-Quinolinecarboxaldehyde
 4368-56-3, C.I. 62045 4438-16-8, C.I. 11320 4444-26-2,
 Hexaaminobenzene 4460-86-0, 2,4,5-Trimethoxybenzaldehyde 4569-88-4,
 Janusblue 4928-43-2, 2-Dimethylamino-5-aminopyridine 4940-39-0,
 Chromone-2-carboxylic acid 5007-67-0, 3,3',4,4'-Tetraaminobenzophenone
 5099-39-8, 2-[2-(Diethylamino)ethylamino]-5-nitroaniline 5131-58-8
 5153-57-1 5192-03-0, 5-Aminoindole 5192-04-1, 7-Aminoindole
 5192-23-4, 4-Aminoindole 5217-47-0, 1,3-Diethylthiobarbituric acid
 5260-37-7, 3-Ethyl-2-methylbenzoxazolium iodide 5274-70-4,
 2-Hydroxy-3-nitrobenzaldehyde 5307-02-8 5307-14-2,
 1,4-Diamino-2-nitrobenzene 5318-27-4, 6-Aminoindole 5345-47-1,
 2-Aminonicotinic acid 5392-12-1, 2-Methoxy-1-naphthaldehyde 5416-80-8
 5418-63-3, 1,2,3,3-Tetramethyl-3H-indolium iodide 5432-53-1 5434-20-8,
 3-Aminophthalic acid 5466-88-6, 2H-1,4-Benzoxazin-3(4H)-one 5551-11-1,
 4-Chloro-2-nitrobenzaldehyde 5556-84-3, 2,3,5-Trimethoxybenzaldehyde
 5556-86-5, 2,3,6-Trimethoxybenzaldehyde 5650-41-9, 3-
 Hydroxypropiofenone 5679-13-0, 2-Benzylidenecyclopentanone 5682-83-7,
 2-Benzylidenecyclohexanone 5718-83-2, Rhodanine-3-acetic acid
 5858-51-5, C.I. 14805 5910-23-6 5930-28-9, 2,6-Dichloro-4-aminophenol
 5959-52-4, 3-Amino-2-naphthoic acid 6051-53-2 6203-18-5,
 4-Dimethylaminozimaldehyde 6271-44-9, 1,2,3-Trimethylquinoxalinium
 iodide 6322-56-1, 4-Hydroxy-3-nitroacetophenone 6327-79-3 6358-09-4,
 2-Amino-6-chloro-4-nitrophenol 6361-22-4, 2-Chloro-6-nitrobenzaldehyde
 6399-72-0, 6-Amino-7-hydroxynaphthalene-2-sulfonic acid 6470-98-0,
 Mordant Yellow 12 6628-04-2, 4-Aminoquinoline 6628-86-0,
 5-Chloro-2-nitrobenzaldehyde 6633-46-1 6635-20-7, 5-Nitrovanillin
 6781-42-6, 1,3-Diacetylbenzene 6967-12-0, 6-Aminoindazole 7218-02-2
 7311-34-4, 3,5-Dimethoxybenzaldehyde 7313-70-4, 5-Sulfo-isatin
 7459-75-8, 3,6-Diaminoacridine-Hydrochloride 7570-45-8 7575-35-1,
 N,N-Bis(2-hydroxyethyl)-p-phenylenediamine 7722-84-1, Hydrogen peroxide,

biological studies 7749-47-5, 2-Amino-4-methoxy-6-methylpyrimidine
 7770-45-8, 4-Hydroxy-1-naphthaldehyde 8005-78-5, C.I. 21010
 10031-82-0, 4-Ethoxybenzaldehyde 10040-98-9, 4-(1-
 Imidazolyl)benzaldehyde 10041-06-2 10111-08-7, 1H-Imidazole-2-
 carboxaldehyde 10127-36-3, C.I. 51010 10173-66-7, 1-Amino-4-nitro-2-(2-
 nitrobenzylideneamino)benzene 10182-90-8D, 2-Formyl-1-methylpyridinium,
 salt 10338-57-5, 4-Piperidinobenzaldehyde 10342-85-5 10472-94-3
 12217-43-5, Basic Blue 47 13066-97-2 13441-40-2D, salt 13505-39-0,
 3-Hydroxybutyrophenone 13669-42-6, 3-Quinolinecarboxaldehyde
 13754-19-3, 4,5-Diaminopyrimidine 14268-66-7, 3,4-Methylenedioxyaniline
 14338-36-4, 3-Aminophenylacetic acid 14501-66-7 14501-66-7D, salt
 14575-62-3 14933-76-7, 3-Ethyl-2-methylbenzothiazolium-p-
 toluenesulfonate 15174-69-3, 4-Hydroxy-3-methylbenzaldehyde
 15201-05-5D, salt 15971-29-6, 4-Methoxy-1-naphthaldehyde 16082-33-0,
 3,5-Diaminopyrazole 16214-27-0, 1H-Indene-1,2(3H)-dione 16588-34-4,
 4-Chloro-3-nitrobenzaldehyde 16634-88-1, 5-Bromo-3-nitrosalicylaldehyde
 16859-86-2, 1,4-Dimethylquinolinium iodide 16867-03-1,
 2-Amino-3-hydroxypyridine 16872-11-0D, Tetrafluoroboric acid, salt
 17028-61-4, 2-Hydroxy-3-methoxy-5-nitrobenzaldehyde 17422-74-1
 17630-76-1, 5-Chloroisatin 17672-22-9 17754-90-4, 4-Diethylamino-2-
 hydroxybenzaldehyde 17792-58-4 18073-18-2 18073-18-2D, salt
 18278-34-7, 4-Hydroxy-2-methoxybenzaldehyde 18899-16-6D, salt
 19005-93-7, 1H-Indole-2-carboxaldehyde 19012-02-3 19012-03-4
 19335-11-6, 5-Aminoindazole 20048-92-4, 1-Ethyl-2-methylquinolinium-p-
 toluenesulfonate 20103-09-7, 2,5-Dichloro-p-phenylenediamine
 20357-25-9, 4,5-Dimethoxy-2-nitrobenzaldehyde 20721-50-0, Disperse Black
 9 21240-56-2 22080-96-2, 4-Hydroxy-2,6-dimethoxybenzaldehyde
 22411-59-2 22715-34-0, 2-Hydroxy-4,5,6-triaminopyrimidine 22924-15-8,
 3-Ethoxybenzaldehyde 22948-94-3 23244-87-3, 2,4,5-Triaminopyridine
 24290-36-6, Sodium glutaconaldehyde 24677-78-9, 2,3-
 Dihydroxybenzaldehyde 24905-87-1 25128-32-9, 5-Carboxyisatin
 26153-38-8, 3,5-Dihydroxybenzaldehyde 26216-16-0 26246-29-7
 26381-41-9, Basic Brown 16 27394-81-6, 5-(4-Methoxyphenyl)penta-2,4-
 dienal 27841-29-8 28020-38-4, 2,3-Diamino-6-methoxypyridine
 28096-15-3 28746-58-9 29539-03-5, 5,6-Dihydroxyindoline 29705-39-3
 31431-19-3 31680-07-6, 4-Methyl-3-nitrobenzaldehyde 31835-64-0,
 3-Amino-3'-nitrobiphenyl 32479-73-5, 1,3-Diethylbarbituric acid
 33709-29-4 33985-71-6 35094-87-2, 2,4,5-Trihydroxybenzaldehyde
 36075-79-3D, salt 37705-82-1, 2,4-Diaminobenzonitrile 39755-03-8,
 4-Hydroxybutyrophenone 39755-95-8, 5-Methoxyisatin 39910-98-0
 41438-18-0, 4-Hydroxy-2-methylbenzaldehyde 41602-56-6,
 4-Dimethylamino-2-hydroxybenzaldehyde 41626-14-6, 1,4-
 Dimethylquinolinium-p-toluene sulfonate 42426-35-7 42454-06-8,
 5-Hydroxy-2-nitrobenzaldehyde 42758-54-3, 4-Nitro-1-naphthaldehyde
 42952-26-1, 1-Methylquinaldinium-p-toluene sulfonate 42952-29-4
 43057-77-8, 4-Ethoxy-2-hydroxybenzaldehyde 45791-64-8D,
 4-Acetyl-1-methylpyridinium, salt 46791-37-1D, salt 46881-39-4D, salt
 50379-28-7 50610-28-1, 2-Chloro-5-nitro-N-hydroxyethyl-1,4-phenylene
 diamine 50899-59-7, 1-Hydroxymethylisatin 51387-92-9 51980-54-2,
 4-Pyrrolidinobenzaldehyde 52924-20-6, 4-Aminosalicylaldehyde
 52943-88-1, 1-Phenyl-3-methyl-4,5-diaminopyrazole 53055-05-3,
 3-Methoxy-2-nitrobenzaldehyde 54424-26-9 54424-27-0 54424-29-2
 54628-24-9D, salt 55047-63-7 55302-96-0, 2-Methyl-5-(2-
 hydroxyethylamino)phenol 55949-38-7, Hydroxypyrimidine 55952-56-2,
 1-Ethyl-4-methylquinolinium-p-toluene sulfonate 56932-44-6 58028-76-5,
 2-Morpholinobenzaldehyde 58380-40-8, 4-Hydroxy-2,3-dimethylbenzaldehyde
 58480-17-4 60126-36-5, 3-Ethyl-2-methylbenzoxazolium-p-toluene sulfonate
61078-47-5 61078-48-6 61224-35-9, 1,2,3,3-Tetramethyl-
 3H-indolium-p-toluene sulfonate 61693-42-3, 3-Amino-2,4-dichlorophenol

61901-61-9, Basic Orange 31 62378-72-7 62496-02-0,
 2-Methylamino-4,5,6-triaminopyrimidine 62649-65-4 63053-27-0
 63149-33-7 63969-46-0, Bis(5-amino-2-hydroxyphenyl)methane 64168-39-4,
 2,3,6-Trihydroxybenzaldehyde
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (oxidative hair dyes composed of primary amino group-containing
 chromophores and reactive carbonyl compds.)

IT 64993-07-3, 5-Amino-6-nitrobenzo-1,3-dioxole 65192-34-9 65192-36-1
 65443-86-9 67608-58-6, 4-Amino-2-hydroxybenzonitrile 67608-59-7
 67805-13-4 68123-13-7, C.I. 56059 68651-46-7, Indigo dye 69471-05-2,
 4-Hydroxy-2,3-dimethoxybenzaldehyde 69825-83-8, 6-Nitro-2,5-
 diaminopyridine 70484-29-6 70547-87-4, 4-Hydroxy-2,6-
 dimethylbenzaldehyde 70643-19-5, 2,4-Diaminophenoxyethanol 74186-01-9,
 2,3,5-Trihydroxybenzaldehyde 75965-68-3 75965-71-8 75965-84-3
 77484-77-6, 3-Amino-6-methylamino-2-nitropyridine 79352-72-0,
 2-Aminomethyl-4-aminophenol 79459-15-7, 3,5-Diethoxy-4-
 hydroxybenzaldehyde 80749-72-0, 4-Hydroxy-2,5-dimethoxybenzaldehyde
 81892-72-0, 1,3-Bis(2,4-diaminophenoxy)propane 82576-75-8 83072-44-0,
 2-Ethoxy-4-hydroxybenzaldehyde 83073-86-3, 5-(4-
 Dimethylaminophenyl)penta-2,4-dienal 83763-47-7, 2-Amino-4-(2-
 hydroxyethylamino)anisole 84540-47-6, 2,6-Dihydroxy-3,4-dimethylpyridine
 84540-50-1, 3-Amino-2-chloro-6-methylphenol 84562-48-1,
 4-Dimethylamino-2-methoxybenzaldehyde 85231-15-8, 4-Hydroxy-2,5-
 dimethylbenzaldehyde 85561-52-0, 1-Phenyl-4,5-diaminopyrazole
 85679-78-3, 2,6-Dimethoxy-3,5-diaminopyridine 85926-99-4,
 4-Hydroxyindoline 90134-10-4, 4-Dibutylaminobenzaldehyde 90817-34-8,
 2-Methylamino-3-amino-6-methoxypyridine 91902-53-3 93841-24-8,
 2-(2,5-Diaminophenyl)ethanol 95576-89-9 96516-29-9,
 2-Fluoro-3-nitrobenzaldehyde 100418-33-5 101582-21-2 104202-54-2
 104333-09-7, 2-Hydroxymethyl-4-aminophenol 104903-49-3 110102-86-8,
 2-Methyl-5-amino-4-chlorophenol 110952-46-0 110952-48-2 114260-09-2
 114402-54-9, 1,3-Bis(4-aminophenylamino)propane 115423-85-3
 115423-86-4, 1,3-Diamino-2,4-dimethoxybenzene 117907-43-4
 122438-74-8D, salt 122455-85-0, 5-Amino-4-fluoro-2-methylphenol
 126335-41-9 126335-43-1, 2-(2,5-Diaminophenoxy)ethanol 128729-30-6,
 1,3-Bis[N-(4-aminophenyl)-2-hydroxyethylamino]-2-propanol 129697-50-3
 130133-55-0 130582-56-8, 1,3-Bis(4-aminophenylamino)-2-propanol
 137290-78-9, 5-Amino-4-methoxy-2-methylphenol 137290-86-9,
 5-(2-Hydroxyethylamino)-4-methoxy-2-methylphenol 141614-04-2
 141614-05-3 141922-20-5, 2,4-Diamino-5-fluorotoluene 144284-89-9
 145092-00-8, 3-Amino-5-hydroxypyrazole 146658-65-3, 5-(3-
 Hydroxypropylamino)-2-methylphenol 147025-37-4D, salt 149330-25-6
 155601-17-5, 1-(2-Hydroxyethyl)-4,5-diaminopyrazole 159661-40-2
 159661-41-3 159661-42-4, 2,5-Dihydroxy-4-morpholinoaniline 159661-43-5
 159661-45-7, 1,8-Bis(2,5-diaminophenoxy)-3,6-dioxaoctane 159759-49-6
 161329-44-8 178822-03-2 187030-52-0, 5-(4-Diethylaminophenyl)penta-2,4-
 dienal 211872-02-5 215517-65-0 215517-66-1 215517-68-3
 220118-56-9, 1,2,3,3-Tetramethyl-3H-indolium-methane sulfonate
 223397-50-0D, salt 223397-66-8D, salt 223397-83-9D, salt
 223397-92-0D, salt 223398-35-4D, salt 223398-44-5D, salt
 223585-63-5, Brilliant Heliotrope 2R 260980-91-4 260980-92-5
 260980-93-6 260980-94-7 260980-95-8 260980-96-9 260980-97-0
 260980-98-1 260980-99-2 260981-00-8 260981-02-0,
 N-(2-Methoxyethyl)-p-phenylenediamine 260981-03-1, 2,3-Dichloro-p-
 phenylenediamine 278807-62-8D, salt 278807-63-9D, salt 278807-64-0D,
 salt 278807-65-1D, salt 278807-66-2D, salt 278807-67-3D, salt
 278807-68-4D, salt 278807-69-5D, salt 278807-70-8D, salt
 278807-71-9D, salt 278807-72-0D, salt 278807-73-1D, salt
 278807-74-2D, salt 278807-75-3D, salt 278807-76-4D, salt

278807-77-5D, salt 278807-78-6D, salt 278807-79-7D, salt
 278807-80-0D, salt 279214-38-9 313219-61-3 **325853-04-1**
325853-09-6 341989-73-9, 2,6-Diethoxy-4-hydroxybenzaldehyde
 346593-13-3, 3-Amino-4-nitroacenaphthene 375856-52-3 503853-81-4
 503853-94-9 503854-79-3D, salt 503854-80-6D, salt 503854-82-8D, salt
 503854-83-9D, salt 503854-84-0D, salt 503854-85-1D, salt
 503854-87-3D, salt 503854-89-5D, salt 503854-90-8D, salt
 503854-92-0D, salt 503854-93-1D, salt 503854-95-3D, salt
 503854-98-6D, salt 503855-00-3D, salt 503855-01-4D, salt
 503855-03-6D, salt 503855-05-8D, salt 503855-07-0D, salt
 503855-11-6D, salt 503856-02-8 503856-17-5 503856-18-6 504433-02-7
 507224-77-3 669057-57-2 669057-58-3 669057-62-9 669057-64-1
 669057-68-5 669057-69-6 669057-71-0 669057-72-1 669057-74-3
 669057-80-1 669057-81-2 669057-82-3 669057-86-7 669057-91-4
 669057-93-6 669057-94-7 669057-96-9 669058-10-0D, salt

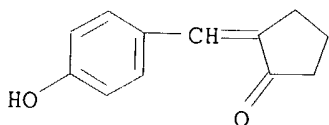
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (oxidative **hair** dyes composed of primary amino group-containing
 chromophores and reactive carbonyl compds.)

IT **61078-47-5 61078-48-6 325853-04-1**
325853-09-6

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (oxidative **hair** dyes composed of primary amino group-containing
 chromophores and reactive carbonyl compds.)

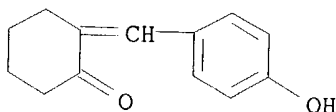
RN 61078-47-5. HCAPLUS

CN Cyclopentanone, 2-[(4-hydroxyphenyl)methylene]- (9CI) (CA INDEX NAME)



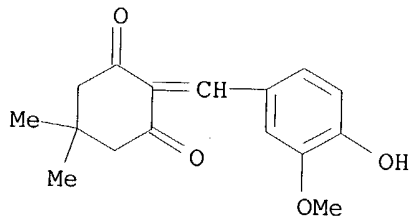
RN 61078-48-6 HCAPLUS

CN Cyclohexanone, 2-[(4-hydroxyphenyl)methylene]- (9CI) (CA INDEX NAME)

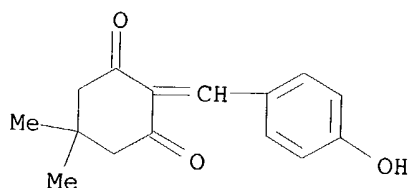


RN 325853-04-1 HCAPLUS

CN 1,3-Cyclohexanedione, 2-[(4-hydroxy-3-methoxyphenyl)methylene]-5,5-dimethyl- (9CI) (CA INDEX NAME)



RN 325853-09-6 HCAPLUS
 CN 1,3-Cyclohexanedione, 2-[(4-hydroxyphenyl)methylene]-5,5-dimethyl- (9CI)
 (CA INDEX NAME)



L76 ANSWER 3 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 2004:525964 HCAPLUS
 DN 141:76352
 TI Hair dying tablets containing compounds with reactive carbonyl group
 IN Moeller, Hinrich; Gross, Wibke; Hoeffkes, Horst; Oberkobusch, Doris;
 Schulze Zur Wiesche, Erik
 PA Henkel Kgaa, Germany
 SO Ger. Offen., 56 pp.
 CODEN: GWXXBX
 DT Patent
 LA German
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 10260880	A1	20040701	DE 2002-10260880	20021223
	WO 2004058202	A1	20040715	WO 2003-EP14202	20031213
	W: CN, JP, RU, US				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR				
PRAI	DE 2002-10260880	A	20021223		

OS MARPAT 141:76352
 AB The invention concerns oxydative hair dye compns. containing compds. with reactive carbonyl group and that are formulated as tablets; developer and coupler can be formulated as two tablets or as one tablet with developer layer, coupler layer and a dividing layer between the two. Addnl. components are selected from the group of CH-acids, primary and secondary amines, arylamines, hydroxy compds., amino acids and peptides, and dissoln. enhancers. Thus a tablet base composition contained (g): arginine 0.50; Avicel PH102 1.10; magnesium stearate 0.03; Merquat 280 dry 0.05; Aerosil 200 0.01; Optigel SH 0.20; Jaguar HP 120 0.25; Amaze 0.08; Luviskol K30 0.07; Texapon K1296 PLV 0.03. To prepare hair dye tablets 2.32 g of the base composition was mixed for the first tablet with 0.30 g Starlac, 1.38 g 4-formyl-1-methylquinolinium-p-toluene sulfate; for the second tablet with 0.73 g Starlac and 0.95 g 2,4,5,6-tetraaminopyrimidine sulfate.
 IC ICM A61K007-13
 ICS D06P003-10; D06P003-14; D06P003-30
 CC 62-3 (Essential Oils and Cosmetics)
 ST oxidative hair dye tablet reactive carbonyl group
 IT Acids, biological studies
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (CH-acids; hair dying tablets containing compds. with reactive carbonyl group)
 IT Amines, biological studies

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(aromatic; hair dying tablets containing compds. with reactive carbonyl group)

IT Dyes
(direct, cationic; hair dying tablets containing compds. with reactive carbonyl group)

IT Hair preparations
(dyes, oxidative; hair dying tablets containing compds. with reactive carbonyl group)

IT Hair preparations
(dyes; hair dying tablets containing compds. with reactive carbonyl group)

IT Hair preparations
(emulsions; hair dying tablets containing compds. with reactive carbonyl group)

IT Dissolution
(enhancers; hair dying tablets containing compds. with reactive carbonyl group)

IT Hair preparations
(gels; hair dying tablets containing compds. with reactive carbonyl group)

IT Tablets
(hair dyes; hair dying tablets containing compds. with reactive carbonyl group)

IT Alkalinity
Bitterness
Carbonyl group
Oxidizing agents
Pearlescent pigments
Thickening agents
(hair dying tablets containing compds. with reactive carbonyl group)

IT Amino acids, biological studies
Bromides, biological studies
Carbonyl compounds (organic), biological studies
Chlorides, biological studies
Hydroxy compounds
Iodides, biological studies
Peptides, biological studies
Perchlorates
Polyoxyalkylenes, biological studies
Sulfates, biological studies
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(hair dying tablets containing compds. with reactive carbonyl group)

IT Sulfates, biological studies
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(hydrogen; hair dying tablets containing compds. with reactive carbonyl group)

IT Viscosity
(of dissolved tablets; hair dying tablets containing compds. with reactive carbonyl group)

IT Hardness (mechanical)
(of tablets; hair dying tablets containing compds. with reactive carbonyl group)

IT Emulsions
(oil-in-water; hair dying tablets containing compds. with reactive carbonyl group)

IT Enzymes, biological studies
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(oxidizing; hair dying tablets containing compds. with reactive carbonyl group)

IT Amines, biological studies

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (primary; hair dying tablets containing compds. with reactive carbonyl group)

IT Amines, biological studies
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (secondary; hair dying tablets containing compds. with reactive carbonyl group)

IT Emulsions
 (water-in-oil; hair dying tablets containing compds. with reactive carbonyl group)

IT 59-48-3, Oxindol 60-80-0 66-72-8, Pyridoxal 67-52-7, Barbituric acid
 70-70-2 74-79-3, L-Arginine, biological studies 75-75-2,
 Methanesulfonic acid 77-78-1D, Methylsulfate, salts 83-33-0,
 1-Indanone 84-83-3 86-51-1, 2,3-Dimethoxybenzaldehyde 89-84-9
 90-02-8, Salicylaldehyde, biological studies 90-44-8, Anthrone
 91-56-5, Isatin 93-02-7, 2,5-Dimethoxybenzaldehyde 93-55-0,
 Propiophenone 95-01-2, 2,4-Dihydroxybenzaldehyde 97-51-8,
 2-Hydroxy-5-nitrobenzaldehyde 98-01-1, Furfural, biological studies
 98-86-2, Acetophenone, biological studies 99-61-6, 3-Nitrobenzaldehyde
 99-92-3 99-93-4, 4-Hydroxyacetophenone 100-10-7, 4-N,N-
 Dimethylaminobenzaldehyde 100-83-4, 3-Hydroxybenzaldehyde 104-15-4D,
 salts 117-39-5, Quercetin 118-12-7 118-93-4 120-14-9,
 3,4-Dimethoxybenzaldehyde 120-21-8, 4-Diethylaminobenzaldehyde
 120-46-7, 2-Benzoylacetophenone 120-57-0, Piperonal 121-32-4,
 3-Ethoxy-4-hydroxybenzaldehyde 121-33-5, Vanillin 121-71-1 122-57-6
 123-08-0, 4-Hydroxybenzaldehyde 123-11-5, 4-Methoxybenzaldehyde,
 biological studies 126-81-8, 5,5-Dimethylcyclohexane-1,3-dione
 131-56-6, 2,4-Dihydroxybenzophenone 134-96-3, 4-Hydroxy-3,5-
 dimethoxybenzaldehyde 135-02-4, 2-Methoxybenzaldehyde 139-85-5,
 3,4-Dihydroxybenzaldehyde 141-84-4 326-91-0, 2-Thenoyltrifluoroacetone
 350-03-8, 3-Acetylpyridine 387-46-2, 2,6-Dihydroxybenzaldehyde
 458-36-6, Coniferylaldehyde 480-66-0 486-25-9, 9-Fluorenone
 487-70-7, 2,4,6-Trihydroxybenzaldehyde 487-89-8, 3-Indolealdehyde
 490-78-8 491-38-3, Chromone 491-67-8, 5,6,7-Trihydroxyflavone
 498-02-2 500-22-1, 3-Pyridinaldehyde 504-17-6, Thiobarbituric acid
 520-36-5, 4',5,7-Trihydroxyflavone 525-82-6, Flavone 528-21-2
 528-75-6, 2,4-Dinitrobenzaldehyde 548-83-4, 3,5,7-Trihydroxyflavone
 552-89-6, 2-Nitrobenzaldehyde 553-86-6, Cumaranone 555-16-8,
 4-Nitrobenzaldehyde, biological studies 574-19-6 577-56-0 577-85-5,
 3-Hydroxyflavone 579-72-6, 2-Dimethylaminobenzaldehyde 586-89-0
 591-31-1, 3-Methoxybenzaldehyde 605-59-4, 1-Ethyl-4-methylquinolinium
 iodide 606-23-5, Indan-1,3-dione 606-31-5, 2,6-Dinitrobenzaldehyde
 606-55-3, 1-Ethyl-2-methylquinolinium iodide 608-08-2, 3-Indoxylacetate
 610-99-1 611-09-6, 5-Nitroisatin 611-99-4, 4,4'-Dihydroxybenzophenone
 613-45-6, 2,4-Dimethoxybenzaldehyde 613-69-4, 2-Ethoxybenzaldehyde
 614-16-4, Benzoylacetone nitrile 621-59-0, 3-Hydroxy-4-methoxybenzaldehyde
 673-22-3, 2-Hydroxy-4-methoxybenzaldehyde 698-63-5, 5-Nitrofurfural,
 biological studies 699-83-2 703-80-0, 3-Acetylindole 704-13-2,
 3-Hydroxy-4-nitrobenzaldehyde 708-06-5, 2-Hydroxy-1-naphthaldehyde
 711-79-5 712-97-0, 6-Nitropiperonal 779-90-8, 1,3,5-Triacetylbenzene
 821-42-1, 2-Pentenedial 830-74-0, 1-Allylisatin 830-79-5,
 2,4,6-Trimethoxybenzaldehyde 832-58-6, 2,4,6-Trimethoxyacetophenone
 872-85-5, 4-Pyridinecarboxaldehyde 876-87-9, 1,2-Dimethylquinolinium
 iodide 932-16-1, 1-Methyl-2-acetylpyrrole 943-88-4,
 4-Methoxybenzylideneacetone 1009-61-6, 1,4-Diacetylbenzene 1080-12-2,
 4-Hydroxy-3-methoxybenzylideneacetone 1080-74-6, 3-Dicyanomethyleneindan-
 1-one 1121-60-4, 2-Pyridinaldehyde 1122-54-9, 4-Acetylpyridine
 1122-62-9, 2-Acetylpyridine 1136-86-3 1137-42-4, 4-Hydroxybenzophenone
 1143-38-0, 1,8-Dihydroxyanthrone 1143-72-2, 2,3,4-Trihydroxybenzophenone

1192-58-1 1194-98-5, 2,5-Dihydroxybenzaldehyde 1199-59-3,
 4-Dimethylamino-2-methylbenzaldehyde 1204-86-0, 4-Morpholinobenzaldehyde
 1217-89-6, N-Benzylisatin 1424-66-4, 2-Chloro-4-
 dimethylaminobenzaldehyde 1450-75-5 1466-88-2 1470-79-7,
 2,4,4'-Trihydroxybenzophenone 1483-97-2, 3,6-Diacetyl-9-ethylcarbazole
 1484-05-5, 3-Acetyl-9-methylcarbazole 1504-76-3 1734-79-8 1874-22-2,
 3-(5-Nitro-2-furyl)acrolein 1971-81-9, 4-Dimethylamino-1-naphthaldehyde
 2058-74-4, 1-Methylisatin 2089-78-3 2103-57-3, 2,3,4-
 Trimethoxybenzaldehyde 2124-31-4 2144-08-3, 2,3,4-
 Trihydroxybenzaldehyde 2233-18-3, 4-Hydroxy-3,5-dimethylbenzaldehyde
 2291-40-9 2478-38-8 2539-53-9, 4-Ethoxy-3-hydroxybenzaldehyde
 2654-52-6, 2,3-Dimethylbenzothiazolium-p-toluenesulfonate 2688-48-4
 2688-49-5 2785-06-0, 2,3-Dimethylbenzothiazolium iodide 2835-77-0,
 2-Aminobenzophenone 2835-99-6, 3-Methyl-4-aminophenol 2887-61-8,
 2-Hydroxybutyrophenone 3011-34-5, 4-Hydroxy-3-nitrobenzaldehyde
 3119-93-5, 3-Ethyl-2-methylbenzothiazolium iodide 3158-63-2,
 1,3-Dimethylthiobarbituric acid 3160-35-8, 4-Hydroxybenzylideneacetone
 3160-37-0 3198-32-1D, Benzenesulfonate, salts 3215-37-0,
 3-Acetylcarbazole 3392-97-0, 2,6-Dimethoxybenzaldehyde 3433-54-3,
 6-Nitroisatin 3565-42-2, Quinisatine 4290-82-8 4335-90-4
 4363-93-3, 4-Quinolinecarboxaldehyde 4460-86-0, 2,4,5-
 Trimethoxybenzaldehyde 4940-39-0, Chromone-2-carboxylic acid
 5217-47-0, 1,3-Diethylthiobarbituric acid 5260-37-7,
 3-Ethyl-2-methylbenzoxazolium iodide 5274-70-4, 2-Hydroxy-3-
 nitrobenzaldehyde 5392-12-1, 2-Methoxy-1-naphthaldehyde 5416-80-8
 5418-63-3, 1,2,3,3-Tetramethyl-3H-indolium iodide 5432-53-1,
 4-Dimethylaminobenzylideneacetone 5466-88-6, 2H-1,4-Benzoxazin-3(4H)-one
 5551-11-1, 4-Chloro-2-nitrobenzaldehyde 5556-84-3, 2,3,5-
 Trimethoxybenzaldehyde 5556-86-5, 2,3,6-Trimethoxybenzaldehyde
 5650-41-9, 3-Hydroxypropiophenone 5679-13-0, 2-Benzylidenecyclopentanone
 5682-83-7, 2-Benzylidenecyclohexanone 5718-83-2, Rhodanine-3-acetic acid
 6051-53-2, 2-Hydroxybenzylideneacetone 6203-18-5, 4-Dime-
 thylaminozimaldehyde 6271-44-9, 1,2,3-Trimethylquinoxalinium iodide
 6322-56-1, 4-Hydroxy-3-nitroacetophenone 6361-22-4, 2-Chloro-6-
 nitrobenzaldehyde 6374-92-1, 5,7-Dichloroisatin 6532-16-7,
 N-Morpholinomethylisatin 6628-86-0, 5-Chloro-2-nitrobenzaldehyde
 6633-46-1 6635-20-7, 5-Nitrovanillin 6781-42-6, 1,3-Diacetylbenzene
 7216-42-4 7311-34-4, 3,5-Dimethoxybenzaldehyde 7313-70-4,
 Isatin-5-sulfonic acid 7570-45-8, N-Ethylcarbazol-3-aldehyde
 7722-84-1, Hydrogen peroxide, biological studies 7770-45-8,
 4-Hydroxy-1-naphthaldehyde 10031-82-0, 4-Ethoxybenzaldehyde
 10040-98-9, 4-(1-Imidazolyl)benzaldehyde 10041-06-2 10111-08-7,
 1H-Imidazole-2-carboxaldehyde 10182-90-8D, 2-Formyl-1-methylpyridinium,
 salts 10338-57-5, 4-Piperidinobenzaldehyde 10342-85-5 12270-25-6,
 Basic red 51 13129-69-6, N-Piperidinomethylisatin 13441-40-2D, salts
 13441-42-4D, salts 13505-39-0, 3-Hydroxybutyrophenone 13669-42-6,
 3-Quinolinecarboxaldehyde 14501-66-7 14874-70-5D, Tetrafluoroborate,
 salts 14933-76-7, 3-Ethyl-2-methylbenzothiazolium-p-toluenesulfonate
 15032-10-7 15174-69-3, 4-Hydroxy-3-methylbenzaldehyde 15971-29-6,
 4-Methoxy-1-naphthaldehyde 16214-27-0, Indan-1,2-dione 16588-34-4,
 4-Chloro-3-nitrobenzaldehyde 16634-88-1, 5-Bromo-3-nitrosalicylaldehyde
 16859-86-2, 1,4-Dimethylquinolinium iodide 16919-18-9D,
 Hexafluorophosphate, salts 17028-61-4, 2-Hydroxy-3-methoxy-5-
 nitrobenzaldehyde 17422-74-1 17630-76-1, 5-Chloroisatin 17754-90-4,
 4-Diethylamino-2-hydroxybenzaldehyde 17792-58-4 18073-18-2
 18278-34-7, 4-Hydroxy-2-methoxybenzaldehyde 18899-16-6D, salts
 19005-93-7, 1H-Indole-2-carboxaldehyde 19012-02-3, 1-Methyl-3-
 acetylidole 19012-03-4 19143-35-2, N-Methylpyridoxal 20048-92-4,
 1-Ethyl-2-methylquinolinium-p-toluenesulfonate 20357-25-9,

4,5-Dimethoxy-2-nitrobenzaldehyde 21240-56-2 22080-96-2,
 4-Hydroxy-2,6-dimethoxybenzaldehyde 22411-59-2 22924-15-8,
 3-Ethoxybenzaldehyde 22948-94-3 24677-78-9, 2,3-Dihydroxybenzaldehyde
 25128-32-9 25322-68-3, Polyethylene glycol 26153-38-8,
 3,5-Dihydroxybenzaldehyde
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (hair dying tablets containing compds. with reactive carbonyl group)
 IT 27311-52-0 27394-81-6, 5-(4-Methoxyphenyl)penta-2,4-dienal 28746-58-9
 31541-32-9 31680-07-6, 4-Methyl-3-nitrobenzaldehyde 32479-73-5,
 1,3-Diethylbarbituric acid 33709-29-4 33985-71-6 35094-87-2,
 2,4,5-Trihydroxybenzaldehyde 36075-79-3D, salts 36518-76-0
 37181-39-8D, Trifluoromethanesulfonate, salts 39421-75-5, Jaguar HP120
 39755-03-8, 4-Hydroxybutyrophenone 39755-95-8, 5-Methoxyisatin
 39910-98-0 41438-18-0, 4-Hydroxy-2-methylbenzaldehyde 41602-56-6,
 4-Dimethylamino-2-hydroxybenzaldehyde 41704-95-4, Isatin-4-carboxylic
 acid 42426-35-7 42454-06-8, 5-Hydroxy-2-nitrobenzaldehyde
 42758-54-3, 4-Nitro-1-naphthaldehyde 43057-77-8, 4-Ethoxy-2-
 hydroxybenzaldehyde 45791-64-8D, 4-Acetyl-1-methylpyridinium, salts
 46791-37-1D, salts 46881-39-4D, salts 49647-58-7, 2,4,5,6-
 Tetraaminopyrimidine sulfate 50379-28-7 50899-59-7 51107-64-3D,
 salts 51980-54-2, 4-Pyrrolidinobenzaldehyde 53003-19-3 53003-20-6
 53019-76-4 53055-05-3, 3-Methoxy-2-nitrobenzaldehyde 54424-26-9
 54424-27-0 54424-29-2 54628-24-9D, salts 55047-63-7 55952-56-2,
 1-Ethyl-4-methylquinolinium-p-toluenesulfonate 58028-76-5,
 2-Morpholinobenzaldehyde 58380-40-8, 4-Hydroxy-2,3-dimethylbenzaldehyde
 59184-59-7 60126-36-5, 3-Ethyl-2-methylbenzoxazolium-p-toluenesulfonate
61078-47-5, 2-(4-Hydroxybenzylidene)cyclopentanone
61078-48-6, 2-(4-Hydroxybenzylidene)cyclohexanone 62378-72-7
 63053-27-0 64168-39-4, 2,3,6-Trihydroxybenzaldehyde 65192-34-9
 65192-36-1 65443-86-9 67805-13-4 68549-78-0 69471-05-2,
 4-Hydroxy-2,3-dimethoxybenzaldehyde 69564-74-5 70484-29-6
 70547-87-4, 4-Hydroxy-2,6-dimethylbenzaldehyde 74186-01-9,
 2,3,5-Trihydroxybenzaldehyde 74380-12-4 75965-68-3 75965-71-8
 75965-84-3 79459-15-7, 3,5-Diethoxy-4-hydroxybenzaldehyde 80749-72-0,
 4-Hydroxy-2,5-dimethoxybenzaldehyde 80789-74-8, 5-Isatinsulfonic acid
 sodium salt 83072-44-0, 2-Ethoxy-4-hydroxybenzaldehyde 83073-86-3,
 5-(4-Dimethylaminophenyl)penta-2,4-dienal 84562-48-1,
 4-Dimethylamino-2-methoxybenzaldehyde 84677-32-7 85231-15-8,
 4-Hydroxy-2,5-dimethylbenzaldehyde 90134-10-4, 4-
 Dibutylaminobenzaldehyde 91902-53-3 96516-29-9, 2-Fluoro-3-
 nitrobenzaldehyde 97095-30-2 100727-07-9 101558-59-2D,
 4-Benzoyl-1-methylpyridinium, salts 101582-21-2 104202-54-2
 106110-60-5 115571-79-4 116844-55-4, Basic yellow 87 122438-74-8D,
 salts 124315-67-9 130133-55-0 133437-59-9 144284-89-9
 147025-37-4D, salts 147801-94-3 147801-97-6 155601-30-2,
 4,5-Diamino-1-(2-hydroxyethyl)pyrazole sulfate 159759-49-6 169381-72-0
 187030-52-0, 5-(4-Diethylaminophenyl)penta-2,4-dienal 199916-92-2
 215377-39-2 215377-40-5 215377-41-6 215377-42-7 215377-43-8
 215377-45-0 215377-46-1 215377-47-2 215377-48-3 215377-49-4
 215377-50-7 215517-65-0 215517-66-1 215517-68-3 220118-52-5
 220118-53-6 220118-56-9, 1,2,3,3-Tetramethyl-3H-indolium
 methanesulfonate 223397-50-0D, salts 223397-66-8D, salts
 223397-83-9D, salts 223397-92-0D, salts 223398-02-5 223398-35-4D,
 salts 223398-44-5 223398-44-5D, salts 223398-52-5D, salts
 223398-61-6D, salts 223398-72-9 260980-91-4 260980-92-5
 260980-93-6 260980-94-7 260980-95-8 260980-96-9 260980-97-0
 260980-98-1 260980-99-2 260981-00-8 278807-62-8D, salts
 278807-63-9D, salts 278807-65-1D, salts 278807-66-2D, salts
 278807-68-4D, salts 278807-69-5D, salts 278807-70-8D, salts

278807-72-0D, salts 278807-73-1D, salts 278807-74-2D, salts
 278807-75-3D, salts 278807-76-4D, salts 278807-79-7D, salts
 278807-80-0D, salts 279214-38-9 **325853-04-1**
325853-08-5 325853-09-6 341989-73-9,
 2,6-Diethoxy-4-hydroxybenzaldehyde 343218-85-9 481648-77-5, Starlac
 503853-81-4 503853-94-9 503854-80-6D, salts 503854-82-8D, salts
 503854-83-9D, salts 503854-85-1D, salts 503854-87-3D, salts
 503854-88-4D, salts 503854-89-5D, salts 503854-90-8D, salts
 503854-91-9D, salts 503854-92-0D, salts 503854-93-1D, salts
 503854-98-6D, salts 503855-01-4D, salts 503855-03-6D, salts
 503855-05-8D, salts 503855-07-0D, salts 503855-09-2D, salts
 503855-32-1 503855-35-4 503855-38-7 503855-42-3 503855-44-5
 503855-47-8 503855-48-9 503855-49-0 503855-50-3 503855-51-4
 503855-52-5 503855-53-6 503855-54-7 503855-55-8 504433-01-6
 504433-02-7 507224-48-8 669057-57-2, Pyrimidinium,
 1,3-diethyl-2,3-dihydro-4,6-dimethyl-2-oxo-, chloride 669057-58-3
 669057-62-9 669057-64-1 669057-68-5 669057-69-6 669057-71-0
 669057-72-1 669057-74-3 669057-80-1 669057-81-2 669057-82-3
 669057-86-7 669057-91-4 669057-93-6 669057-94-7 669057-96-9
 708260-22-4D, salts 711012-37-2 711012-39-4 711012-41-8
 711012-42-9 711012-43-0 711012-44-1 711012-45-2D, salts
 711012-47-4 711012-48-5 711012-52-1D, salts 711012-56-5

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(hair dying tablets containing compds. with reactive carbonyl group)

IT 9004-34-6, Avicel PH102, biological studies

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(microcryst.; hair dying tablets containing compds. with reactive carbonyl group)

IT **61078-47-5**, 2-(4-Hydroxybenzylidene)cyclopentanone

61078-48-6, 2-(4-Hydroxybenzylidene)cyclohexanone

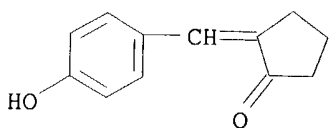
325853-04-1 325853-08-5 325853-09-6

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(hair dying tablets containing compds. with reactive carbonyl group)

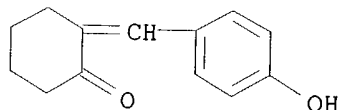
RN 61078-47-5 HCAPLUS

CN Cyclopentanone, 2-[(4-hydroxyphenyl)methylene]- (9CI) (CA INDEX NAME)



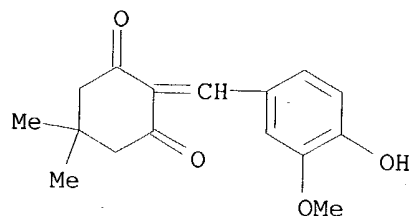
RN 61078-48-6 HCAPLUS

CN Cyclohexanone, 2-[(4-hydroxyphenyl)methylene]- (9CI) (CA INDEX NAME)

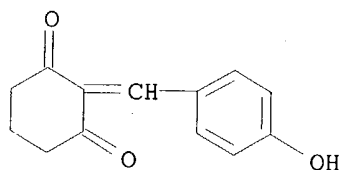


RN 325853-04-1 HCAPLUS

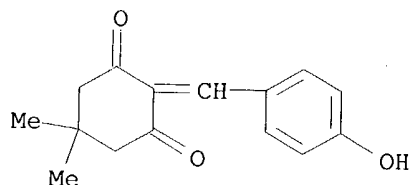
CN 1,3-Cyclohexanedione, 2-[(4-hydroxy-3-methoxyphenyl)methylene]-5,5-dimethyl- (9CI) (CA INDEX NAME)



RN 325853-08-5 HCAPLUS
CN 1,3-Cyclohexanedione, 2-[(4-hydroxyphenyl)methylene]- (9CI) (CA INDEX NAME)



RN 325853-09-6 HCAPLUS
CN 1,3-Cyclohexanedione, 2-[(4-hydroxyphenyl)methylene]-5,5-dimethyl- (9CI) (CA INDEX NAME)



L76 ANSWER 4 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2004:525054 HCAPLUS
DN 141:59192
TI Hair dyes containing 1,3-dioxane-4,6-dione derivatives
IN Gross, Wibke; Hoeffkes, Horst; Oberkobusch, Doris
PA Henkel Kommanditgesellschaft Auf Aktien, Germany
SO Eur. Pat. Appl., 36 pp.
CODEN: EPXXDW
DT Patent
LA German
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 1433469	A1	20040630	EP 2003-28794	20031213
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
DE 10260832	A1	20040701	DE 2002-10260832	20021223
PRAI DE 2002-10260832	A	20021223		
OS MARPAT 141:59192				

- AB The invention concerns hair dyes that contain 1,3-dioxane-4,6-dion derivs.; addnl. components are aldehydes, ketones, primary and secondary arylamines, aryl hydroxy compds., heterocycles and color enhancers. Thus 3 mmol of Meldrum's acid was mixed with 0.41 g sodium acetate in 30 mL water; 3 mmol of 2-methoxy cinnamic acid was added and pH was set to 6 with diluted hydrochloric acid. The mixture resulted yellow color on a hair sample.
- IC ICM A61K007-13
- CC 62-3 (Essential Oils and Cosmetics)
- ST hair dye dioxane dione deriv aryl amine aldehyde
- IT Amines, biological studies
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (aromatic; hair dyes containing 1,3-dioxane-4,6-dion derivs.)
- IT Hair preparations
 (dyes, oxidative; hair dyes containing 1,3-dioxane-4,6-dion derivs.)
- IT Hair preparations
 (dyes; hair dyes containing 1,3-dioxane-4,6-dion derivs.)
- IT Aldehydes, biological studies
 Carbonates, biological studies
 Halides
 Heterocyclic compounds
 Hydroxy compounds
 Ketones, biological studies
 Phosphates, biological studies
 Sulfates, biological studies
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (hair dyes containing 1,3-dioxane-4,6-dion derivs.)
- IT 50-21-5D, Lactic acid, salts 59-48-3, Oxindol 62-53-3, Aniline, biological studies 64-18-6D, Formic acid, salt 64-19-7D, Acetic acid, salts 65-49-6, 4-Aminosalicylic acid 66-72-8, Pyridoxal 67-52-7, Barbituric acid 70-70-2 71-00-1, L-Histidine, biological studies 74-79-3, L-Arginine, biological studies 77-92-9D, Citric acid, salts 79-09-4D, Propionic acid, salts 79-14-1D, Glycolic acid, salts 83-07-8, 4-Amino-2,3-dimethyl-1-phenyl-3-pyrazolin-5-one 83-30-7, 2,4,6-Trihydroxybenzoic acid 83-33-0, 1-Indanone 83-56-7, 1,5-Dihydroxynaphthalene 84-83-3, 2-Formylmethylene-1,3,3-trimethylindoline 86-51-1, 2,3-Dimethoxybenzaldehyde 87-02-5, 7-Amino-4-hydroxynaphthalene-2-sulfonic acid 87-66-1, Pyrogallol 87-69-4D, Tartaric acid, salts 88-21-1, 2-Aminobenzenesulfonic acid 88-74-4, 2-Nitroaniline 89-25-8, 3-Methyl-1-phenylpyrazolin-5-one 89-57-6, 5-Aminosalicylic acid 89-84-9 89-86-1, 2,4-Dihydroxybenzoic acid 90-02-8, 2-Hydroxybenzaldehyde, biological studies 90-15-3, 1-Naphthol 90-20-0, 4-Amino-5-hydroxynaphthalene-2,7-disulfonic acid 90-44-8, Anthrone 91-29-2, 4'-Amino-4-nitrodiphenylamine-2-sulfonic acid 91-56-5, Isatin 91-95-2, 3,3',4,4'-Tetraaminodiphenyl 92-44-4, 2,3-Naphthalenediol 92-65-9, N-(2-Hydroxyethyl)-N-ethyl-p-phenylenediamine 93-02-7, 2,5-Dimethoxybenzaldehyde 93-05-0, N,N-Diethyl-p-phenylenediamine 93-55-0, Propiophenone 95-01-2, 2,4-Dihydroxybenzaldehyde 95-54-5, o-Phenylenediamine, biological studies 95-55-6, 2-Aminophenol 95-70-5, 2,5-Diaminotoluol 95-88-5, 4-Chlororesorcin 96-91-3, Picramic acid 96-93-5, 3-Amino-4-hydroxy-5-nitrobenzenesulfonic acid 97-51-8, 2-Hydroxy-5-nitrobenzaldehyde 98-01-1, Furfural, biological studies 98-37-3, 3-Amino-4-hydroxybenzenesulfonic acid 98-79-3, Pyrrolidone-5-carboxylic acid 98-86-2, Acetophenone, biological studies 99-05-8, 3-Aminobenzoic acid 99-07-0 99-31-0, 5-Aminoisophthalic acid 99-50-3, 3,4-Dihydroxybenzoic acid 99-56-9, 1,2-Diamino-4-nitrobenzene 99-61-6, 3-Nitrobenzaldehyde 99-92-3 99-93-4, 4-Hydroxyacetophenone 99-98-9, N,N-Dimethyl-p-phenylenediamine 100-01-6, 4-Nitroaniline, biological studies

100-10-7, 4-Dimethylaminobenzaldehyde 100-83-4, 3-Hydroxybenzaldehyde
 101-54-2, N-Phenyl-1,4-phenylenediamine 101-77-9, 4,4'-
 Diaminodiphenylmethane 101-80-4, 4,4'-Diaminodiphenyl ether 102-32-9,
 3,4-Dihydroxyphenylacetic acid 106-50-3, p-Phenylenediamine, biological
 studies 107-92-6D, Butyric acid, salts 108-45-2, m-Phenylenediamine,
 biological studies 108-46-3, Resorcin, biological studies 108-72-5,
 1,3,5-Triaminobenzene 108-73-6, Phloroglucin 109-00-2,
 3-Hydroxypyridine 109-52-4D, Valeric acid, salts 110-85-0,
 Piperazidine, biological studies 110-86-1, Pyridine, biological studies
 110-89-4, Piperidine, biological studies 116-63-2, 4-Amino-3-
 hydroxynaphthalene-1-sulfonic acid 117-39-5, Quercetin 118-12-7
 118-70-7, 4,5,6-Triaminopyrimidine 118-92-3, 2-Aminobenzoic acid
 118-93-4 119-34-6, 4-Amino-2-nitrophenol 119-59-5,
 4,4'-Diaminodiphenylsulfoxide 119-61-9, Benzophenone, biological studies
 119-70-0, 4,4'-Diaminodiphenylamine-2-sulfonic acid 120-14-9,
 3,4-Dimethoxybenzaldehyde 120-21-8, 4-Diethylaminobenzaldehyde
 120-46-7, 2-Benzoylacetophenone 120-57-0, Piperonal 121-32-4,
 3-Ethoxy-4-hydroxybenzaldehyde 121-33-5, Vanillin 121-47-1,
 3-Aminobenzenesulfonic acid 121-57-3, 4-Aminobenzenesulfonic acid
 121-71-1 122-57-6 123-08-0, 4-Hydroxybenzaldehyde 123-11-5,
 4-Methoxybenzaldehyde, biological studies 123-30-8, 4-Aminophenol
 123-31-9, Hydroquinone, biological studies 123-75-1, Pyrrolidine,
 biological studies 126-81-8, 5,5-Dimethylcyclohexane-1,3-dione
 131-56-6, 2,4-Dihydroxybenzophenone 134-96-3, 4-Hydroxy-3,5-
 dimethoxybenzaldehyde 135-02-4, 2-Methoxybenzaldehyde 139-65-1,
 4,4'-Diaminodiphenylsulfide 139-85-5, 3,4-Dihydroxybenzaldehyde
 141-84-4 141-86-6, 2,6-Diaminopyridine 142-08-5, 2-Hydroxypyridine
 142-62-1D, Capronic acid, salts 147-85-3, L-Proline, biological studies
 149-91-7, Gallic acid, biological studies 150-13-0, 4-Aminobenzoic acid
 150-19-6, 3-Methoxyphenol 150-75-4, 4-Methylaminophenol 156-81-0,
 2,4-Diaminopyrimidine 326-91-0, 2-Thenoyltrifluoroacetone 350-03-8,
 3-Acetylpyridine 387-46-2, 2,6-Dihydroxybenzaldehyde 452-58-4,
 2,3-Diaminopyridine 458-36-6, Coniferylaldehyde 462-08-8,
 3-Aminopyridine 480-66-0 486-25-9, 9-Fluorenone 487-70-7,
 2,4,6-Trihydroxybenzaldehyde 487-89-8, Indole-3-aldehyde 488-87-9,
 2,5-Dimethylresorcin 490-78-8 491-38-3, Chromone 491-67-8,
 5,6,7-Trihydroxyflavone 496-73-1, 4-Methylresorcin 498-02-2
 498-94-2, Piperidine-4-carboxylic acid 500-22-1, 3-Pyridinaldehyde
 504-15-4 504-17-6, Thiobarbituric acid 504-24-5, 4-Aminopyridine
 504-29-0, 2-Aminopyridine 520-36-5, 4',5,7-Trihydroxyflavone 525-82-6,
 Flavone 528-21-2 528-75-6, 2,4-Dinitrobenzaldehyde 533-31-3,
 3,4-Methylenedioxyphenol 533-73-3, Hydroxyhydroquinone 535-75-1,
 Piperidine-2-carboxylic acid 537-65-5, 4,4'-Diaminodiphenylamine
 548-83-4, 3,5,7-Trihydroxyflavone 552-89-6, 2-Nitrobenzaldehyde
 553-86-6, Cumarone 555-16-8, 4-Nitrobenzaldehyde, biological studies
 570-24-1, 6-Nitro-o-toluidine 574-19-6 577-56-0 577-85-5,
 3-Hydroxyflavone 578-66-5, 8-Aminoquinoline 579-72-6,
 2-Dimethylaminobenzaldehyde 580-17-6, 3-Aminoquinoline 580-22-3,
 2-Aminoquinoline 582-17-2, 2,7-Naphthalenediol 586-89-0 591-27-5,
 3-Aminophenol 591-31-1, 3-Methoxybenzaldehyde 603-81-6,
 2,3-Diaminobenzoic acid 605-59-4, 1-Ethyl-4-methylquinolinium iodide
 606-23-5, Indan-1,3-dione 606-31-5, 2,6-Dinitrobenzaldehyde 606-55-3,
 1-Ethyl-2-methylquinolinium iodide 606-57-5, 2-Amino-1-nitronaphthalene
 608-08-2, 3-Indoxylacetate 608-25-3, 2-Methylresorcin 608-97-9,
 Pentaaminobenzene 610-74-2, 2,5-Diaminobenzoic acid 610-81-1,
 4-Amino-3-nitrophenol 610-99-1 611-03-0, 2,4-Diaminobenzoic acid
 611-09-6, 5-Nitroisatin 611-98-3, 4,4'-Diaminobenzophenone 611-99-4,
 4,4'-Dihydroxybenzophenone 613-45-6, 2,4-Dimethoxybenzaldehyde
 613-69-4, 2-Ethoxybenzaldehyde 614-16-4, Benzoylacetonitrile 614-82-4,

2,4-Dihydroxyphenylacetic acid 615-66-7, 2-Chloro-p-phenylenediamine
 615-71-4, 1,2,4-Triaminobenzene 616-45-5, Pyrrolidone 616-47-7,
 1-Methylimidazole 619-05-6, 3,4-Diaminobenzoic acid 621-59-0,
 3-Hydroxy-4-methoxybenzaldehyde 621-96-5, 4,4'-Diaminostilbene
 626-64-2, 4-Hydroxypyridine 636-25-9, 2,5-Diaminophenol 673-22-3,
 2-Hydroxy-4-methoxybenzaldehyde 698-63-5, 5-Nitrofurfural, biological
 studies 699-83-2 703-80-0, 3-Acetylindole 704-13-2,
 3-Hydroxy-4-nitrobenzaldehyde 708-06-5, 2-Hydroxy-1-naphthaldehyde
 711-79-5 712-97-0, 6-Nitropiperonal 779-90-8, 1,3,5-Triacetylbenzene
 830-74-0, 1-Allylisatin 830-79-5, 2,4,6-Trimethoxybenzaldehyde
 832-58-6, 2,4,6-Trimethoxyacetophenone 872-85-5, 4-
 Pyridinecarboxaldehyde 873-74-5, 4-Aminobenzonitrile 876-87-9,
 1,2-Dimethylquinolinium iodide 932-16-1, 1-Methyl-2-acetylpyrrole
 934-22-5, 5-Aminobenzimidazole 943-88-4, 4-Methoxybenzylideneacetone
 950-81-2, 4-Antipyrinecarboxaldehyde 1004-74-6, 2,4,5,6-
 Tetraaminopyrimidine 1004-75-7, 4-Hydroxy-2,5,6-triaminopyrimidine
 1009-61-6, 1,4-Diacetylbenzene 1080-12-2, 4-Hydroxy-3-
 methoxybenzylideneacetone 1080-74-6 1081-48-7 1121-60-4,
 2-Pyridinaldehyde 1122-54-9, 4-Acetylpyridine 1122-62-9,
 2-Acetylpyridine 1123-55-3, 7-Aminobenzothiazole 1123-93-9,
 5-Aminobenzothiazole 1125-60-6, 5-Aminoisoquinoline 1136-86-3
 1137-42-4, 4-Hydroxybenzophenone 1143-38-0, 1,8-Dihydroxyanthrone
 1143-72-2, 2,3,4-Trihydroxybenzophenone 1192-58-1 1194-98-5,
 2,5-Dihydroxybenzaldehyde 1197-55-3, 4-Aminophenylacetic acid
 1199-59-3, 4-Dimethylamino-2-methylbenzaldehyde 1204-86-0,
 4-Morpholinobenzaldehyde 1424-66-4, 2-Chloro-4-dimethylaminobenzaldehyde
 1450-75-5

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (hair dyes containing 1,3-dioxane-4,6-dione derivs.)

IT 1455-77-2, 3,5-Diamino-1,2,4-triazole 1470-79-7, 2,4,4'-
 Trihydroxybenzophenone 1483-97-2, 3,6-Diacetyl-9-ethylcarbazole
 1484-05-5, 3-Acetyl-9-methylcarbazole 1504-74-1 1504-76-3 1571-72-8,
 3-Amino-4-hydroxybenzoic acid 1620-53-7 1658-27-1,
 1,5-Dioxaspiro[5.5]undecane-2,4-dione 1734-79-8 1820-80-0,
 3-Aminopyrazole 1874-22-2 1963-36-6 1971-81-9, 4-Dimethylamino-1-
 naphthaldehyde 2033-24-1, 1,3-Dioxane-4,6-dione, 2,2-dimethyl-
 2058-74-4, 1-Methylisatin 2089-78-3 2103-57-3, 2,3,4-
 Trimethoxybenzaldehyde 2124-31-4 2144-08-3, 2,3,4-
 Trihydroxybenzaldehyde 2233-18-3, 4-Hydroxy-3,5-dimethylbenzaldehyde
 2291-40-9 2374-03-0, 4-Amino-3-hydroxybenzoic acid 2380-94-1,
 4-Hydroxyindole 2478-38-8 2539-53-9, 4-Ethoxy-3-hydroxybenzaldehyde
 2654-52-6, 2,3-Dimethylbenzothiazolium-p-toluenesulfonate 2688-48-4,
 5-Hydroxy-2-coumaranone 2688-49-5 2784-89-6, 4-Amino-2-
 nitrodiphenylamine 2785-06-0, 2,3-Dimethylbenzothiazolium iodide
 2835-77-0, 2-Aminobenzophenone 2835-95-2, 2-Methyl-5-aminophenol
 2835-98-5 2835-99-6, 4-Amino-3-methylphenol 2871-01-4, HC Red 3
 2887-61-8, 2-Hydroxybutyrophenone 3011-34-5, 4-Hydroxy-3-
 nitrobenzaldehyde 3119-93-5, 3-Ethyl-2-methylbenzothiazolium iodide
 3131-52-0, 5,6-Dihydroxyindole 3158-63-2, 1,3-Dimethylthiobarbituric
 acid 3160-35-8, 4-Hydroxybenzylidene acetone 3160-37-0 3167-49-5,
 6-Aminonicotinic acid 3204-61-3, 1,2,4,5-Tetraaminobenzene 3215-37-0,
 3-Acetylcarbazole 3240-72-0, 2,4-Dihydroxy-5,6-diaminopyrimidine
 3342-78-7, 2-Aminophenylacetic acid 3392-97-0, 2,6-Dimethoxybenzaldehyde
 3433-54-3, 6-Nitroisatin 3565-42-2, Quinisatin 3709-16-8 4181-05-9,
 4-Diphenylaminobenzaldehyde 4318-76-7, 2,5-Diaminopyridine 4331-29-7,
 7-Aminobenzimidazole 4335-90-4 4354-85-2D, 1,3-Dioxane-4,6-dione,
 derivs. 4363-93-3, 4-Quinolincarboxaldehyde 4444-26-2,
 Hexaaminobenzene 4460-86-0, 2,4,5-Trimethoxybenzaldehyde 4928-43-2,
 2-Dimethylamino-5-aminopyridine 4940-39-0, Chromone-2-carboxylic acid

5007-67-0, 3,3',4,4'-Te-traaminobenzophenone 5099-39-8,
 2-[2-(Diethylamino)ethylamino]-5-nitroaniline 5131-58-8 5192-03-0,
 5-Aminoindole 5192-04-1, 7-Aminoindole 5192-23-4, 4-Aminoindole
 5217-47-0, 1,3-Diethylthiobarbituric acid 5260-37-7,
 3-Ethyl-2-methylbenzoxazolium iodide 5274-70-4, 2-Hydroxy-3-
 nitrobenzaldehyde 5307-02-8 5307-14-2, 1,4-Diamino-2-nitrobenzene
 5318-27-4, 6-Aminoindole 5345-47-1, 2-Aminonicotinic acid 5392-12-1,
 2-Methoxy-1-naphthaldehyde 5416-80-8 5418-63-3, 1,2,3,3-Tetramethyl-3H-
 indolium iodide 5432-53-1, 4-Dimethylaminobenzylideneacetone
 5434-20-8, 3-Aminophthalic acid 5466-88-6, 2H-1,4-Benzoxazin-3(4H)-one
 5551-11-1, 4-Chloro-2-nitrobenzaldehyde 5556-84-3, 2,3,5-
 Trimethoxybenzaldehyde 5556-86-5, 2,3,6-Trimethoxybenzaldehyde
 5650-41-9, 3-Hydroxypropiophenone 5679-13-0, 2-Benzylidenecyclopentanone
 5682-83-7, 2-Benzylidenecyclohexanone 5850-35-1, Acid blue 29
 5959-52-4, 3-Amino-2-naphthoic acid 6051-53-2, 2-
 Hydroxybenzylideneacetone 6201-65-6, 2-Chlororesorcin 6203-18-5,
 4-Dimethylaminozimaldehyde 6247-27-4, Mordant brown 4 6259-50-3,
 6-Dimethylamino-4-hydroxy-2-naphthalene sulfonic acid 6271-44-9,
 1,2,3-Trimethylquinoxalinium iodide 6322-56-1, 4-Hydroxy-3-
 nitroacetophenone 6358-09-4, 2-Amino-6-chloro-4-nitrophenol 6361-22-4,
 2-Chloro-6-nitrobenzaldehyde 6399-72-0, 6-Amino-7-hydroxynaphthalene-2-
 sulfonic acid 6628-04-2, 4-Aminoquinaldine 6628-86-0,
 5-Chloro-2-nitrobenzaldehyde 6633-46-1 6634-82-8 6635-20-7,
 5-Nitrovanillin 6781-42-6, 1,3-Diacetylbenzene 6967-12-0,
 6-Aminoindazole 7218-02-2 7311-34-4, 3,5-Dimethoxybenzaldehyde
 7313-70-4, 5-Sulfoisatin 7336-20-1, 4,4'-Diaminostilbene-2,2'-disulfonic
 acid disodium salt 7429-90-5D, Aluminum, salts 7439-89-6D, Iron, salts
 7439-93-2D, Lithium, salts 7439-95-4D, Magnesium, salts 7439-96-5D,
 Manganese, salts 7440-09-7D, Potassium, salts 7440-23-5D, Sodium,
 salts 7440-24-6D, Strontium, salts 7440-39-3D, Barium, salts
 7440-48-4D, Cobalt, salts 7440-50-8D, Copper, salts 7440-66-6D, Zinc,
 salts 7440-70-2D, Calcium, salts 7570-45-8, N-Ethylcarbazol-3-aldehyde
 7575-35-1, N,N-Bis(2-hydroxyethyl)-p-phenylenediamine 7648-01-3
 7664-41-7D, Ammonia, salt 7722-84-1, Hydrogen peroxide, biological
 studies 7749-47-5, 2-Amino-4-methoxy-6-methylpyrimidine 7770-45-8,
 4-Hydroxy-1-naphthaldehyde 10031-82-0, 4-Ethoxybenzaldehyde
 10040-98-9, 4-(1-Imidazolyl)benzaldehyde 10041-06-2 10111-08-7,
 1H-Imidazole-2-carboxaldehyde 10173-66-7 10182-90-8D,
 2-Formyl-1-methylpyridinium, salts 10338-57-5, 4-Piperidinobenzaldehyde
 10342-85-5 13066-97-2 13441-40-2D, salts 13505-39-0,
 3-Hydroxybutyrophenone 13669-42-6, 3-Quinolinecarboxaldehyde
 13754-19-3, 4,5-Diaminopyrimidine 14268-66-7, 3,4-Methylenedioxylaniline
 14338-36-4, 3-Aminophenylacetic acid 14501-66-7 14933-76-7,
 3-Ethyl-2-methylbenzothiazolium-p-toluenesulfonate 15174-69-3,
 4-Hydroxy-3-methylbenzaldehyde 15477-76-6, Phosphonate 15971-29-6,
 4-Methoxy-1-naphthaldehyde 16082-33-0, 3,5-Diaminopyrazole 16588-34-4,
 4-Chloro-3-nitrobenzaldehyde 16634-88-1, 5-Bromo-3-nitrosalicylaldehyde
 16859-86-2, 1,4-Dimethylquinolinium iodide 16867-03-1,
 2-Amino-3-hydroxypyridine 17028-61-4, 2-Hydroxy-3-methoxy-5-
 nitrobenzaldehyde 17422-74-1, Chromone-3-aldehyde 17630-76-1,
 5-Chloroisatin 17672-22-9 17754-90-4, 4-Diethylamino-2-
 hydroxybenzaldehyde 17792-58-4 18073-18-2 18278-34-7,
 4-Hydroxy-2-methoxybenzaldehyde 18899-16-6D, salts 19005-93-7,
 1H-Indole-2-carboxaldehyde 19012-02-3, 1-Methyl-3-acetylinole
 19012-03-4 19275-14-0 19335-11-6, 5-Aminoindazole 19735-89-8,
 1-Phenyl-3-methylpyrazol-5-one 20048-92-4, 1-Ethyl-2-methylquinolinium-p-
 toluene sulfonate 20103-09-7, 2,5-Dichloro-p-phenylenediamine
 20357-25-9, 4,5-Dimethoxy-2-nitrobenzaldehyde 21240-56-2 22080-96-2,
 4-Hydroxy-2,6-dimethoxybenzaldehyde 22411-59-2 22525-43-5

22715-34-0, 2-Hydroxy-4,5,6-triaminopyrimidine 22924-15-8,
 3-Ethoxybenzaldehyde 22948-94-3 23244-87-3, 2,4,5-Triaminopyridine
 23894-07-7 24677-78-9, 2,3-Dihydroxybenzaldehyde 24905-87-1, HC Red 7
 25128-32-9, 5-Carboxyisatin 26153-38-8, 3,5-Dihydroxybenzaldehyde
 26216-16-0 27394-81-6, 5-(4-Methoxyphenyl)penta-2,4-dienal 27841-29-8
 28020-38-4, 2,3-Diamino-6-methoxypyridine 28746-58-9 29539-03-5,
 5,6-Dihydroxyindoline 29705-39-3 31680-07-6, 4-Methyl-3-
 nitrobenzaldehyde 31835-64-0, 3-Amino-3'-nitrobiphenyl 32479-73-5,
 1,3-Diethylbarbituric acid 33709-29-4 33985-71-6 35094-87-2,
 2,4,5-Trihydroxybenzaldehyde 36075-79-3D, salts 36518-76-0
 37705-82-1, 2,4-Diaminobenzonitrile 39755-03-8, 4-Hydroxybutyrophenone
 39755-95-8, 5-Methoxyisatin 39910-98-0 41438-18-0,
 4-Hydroxy-2-methylbenzaldehyde 41602-56-6, 4-Dimethylamino-2-
 hydroxybenzaldehyde 42426-35-7 42454-06-8, 5-Hydroxy-2-
 nitrobenzaldehyde 42758-54-3, 4-Nitro-1-naphthaldehyde 43057-77-8,
 4-Ethoxy-2-hydroxybenzaldehyde 45791-64-8D, 4-Acetyl-1-methylpyridinium,
 salts 46791-37-1D, salts 50610-28-1 50899-59-7, 1-
 Hydroxymethylisatin 51387-92-9 51980-54-2, 4-Pyrrolidinobenzaldehyde
 52943-88-1, 1-Phenyl-3-methyl-4,5-diaminopyrazole 53055-05-3,
 3-Methoxy-2-nitrobenzaldehyde 54628-24-9D, salts 55047-63-7
 55302-96-0, 2-Methyl-5-(2-hydroxyethylamino)phenol 55952-56-2,
 1-Ethyl-4-methylquinolinium-p-toluenesulfonate 56932-44-6, HC Yellow 5
 58028-76-5, 2-Morpholinobenzaldehyde 58093-05-3, 6,10-
 Dioxaspiro[4.5]decane-7,9-dione 58093-06-4, 1,5-Dioxaspiro[5.6]dodecane-
 2,4-dione 58380-40-8, 4-Hydroxy-2,3-dimethylbenzaldehyde 60126-36-5,
 3-Ethyl-2-methylbenzoxazolium-p-toluenesulfonate **61078-47-5**
61078-48-6 61224-35-9, 1,2,3,3-Tetramethyl-3H-indolium-p-toluene
 sulfonate 61693-42-3, 3-Amino-2,4-dichlorophenol 62378-72-7
 62496-02-0, 2-Methylamino-4,5,6-triaminopyrimidine 63053-27-0
 63149-33-7 63969-46-0, Bis(5-amino-2-hydroxyphenyl)methane
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (hair dyes containing 1,3-dioxane-4,6-dione derivs.)
 IT 64168-39-4, 2,3,6-Trihydroxybenzaldehyde 65443-86-9 66347-13-5,
 2,2-Diethyl-1,3-dioxane-4,6-dione 67608-58-6, 4-Amino-2-
 hydroxybenzonitrile 67608-59-7 67805-13-4 69471-05-2,
 4-Hydroxy-2,3-dimethoxybenzaldehyde 69825-83-8, 6-Nitro-2,5-
 diaminopyridine 70484-29-6 70547-87-4, 4-Hydroxy-2,6-
 dimethylbenzaldehyde 70643-19-5, 2,4-Diaminophenoxyethanol 71134-97-9
 74186-01-9, 2,3,5-Trihydroxybenzaldehyde 75965-68-3 75965-71-8
 75965-84-3 77484-77-6, 3-Amino-6-methylamino-2-nitropyridine
 79352-72-0, 2-Aminomethyl-4-aminophenol 79459-15-7, 3,5-Diethoxy-4-
 hydroxybenzaldehyde 80749-72-0, 4-Hydroxy-2,5-dimethoxybenzaldehyde
 81892-72-0, 1,3-Bis(2,4-diaminophenoxy)propane 82576-75-8, HC Violet 1
 83072-44-0, 2-Ethoxy-4-hydroxybenzaldehyde 83073-86-3,
 5-(4-Dimethylaminophenyl)penta-2,4-dienal 83763-47-7 84540-47-6,
 2,6-Dihydroxy-3,4-dimethylpyridine 84540-50-1, 3-Amino-2-chloro-6-
 methylphenol 84562-48-1, 4-Dimethylamino-2-methoxybenzaldehyde
 85231-15-8, 4-Hydroxy-2,5-dimethylbenzaldehyde 85561-52-0,
 1-Phenyl-4,5-diaminopyrazole 85679-78-3, 2,6-Dimethoxy-3,5-
 diaminopyridine 87345-53-7 90134-10-4, 4-Dibutylaminobenzaldehyde
 90817-34-8, 2-Methylamino-3-amino-6-methoxypyridine 91902-53-3
 93841-24-8, 2-(2,5-Diaminophenyl)ethanol 93923-57-0 95576-89-9, HC Red
 10 96516-29-9, 2-Fluoro-3-nitrobenzaldehyde 101582-21-2 104202-54-2
 104333-09-7, 2-Hydroxymethyl-4-aminophenol 104903-49-3 110102-86-8,
 2-Methyl-5-amino-4-chlorophenol 110535-36-9 110952-46-0 114260-09-2
 114402-54-9, 1,3-Bis(4-aminophenylamino)propane 115423-85-3
 115423-86-4, 1,3-Diamino-2,4-dimethoxybenzene 117907-43-4
 122438-74-8D, salts 122455-85-0, 5-Amino-4-fluoro-2-methylphenol
 126335-41-9 126335-43-1, 2-(2,5-Diaminophenoxy)ethanol 128729-30-6,

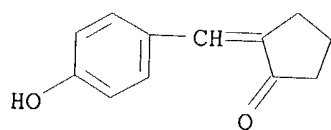
1,3-Bis[N-(4-aminophenyl)-2-hydroxyethylamino]-2-propanol 129697-50-3
 130133-55-0 130582-56-8, 1,3-Bis(4-aminophenylamino)-2-propanol
 137290-78-9, 5-Amino-4-methoxy-2-methylphenol 137290-86-9,
 5-(2-Hydroxyethylamino)-4-methoxy-2-methylphenol 141614-04-2
 141614-05-3 141922-20-5, 2,4-Diamino-5-fluorotoluene 144284-89-9
 145092-00-8, 3-Amino-5-hydroxypyrazole 146658-65-3, 5-(3-Hydroxypro-
 pylamino)-2-methylphenol 147025-37-4D, salts 147801-94-3 149330-25-6
 155601-17-5, 1-(2-Hydroxyethyl)-4,5-diaminopyrazole 159519-79-6,
 Brenzcatechin 159661-40-2 159661-41-3 159661-42-4,
 2,5-Dihydroxy-4-morpholinoaniline 159661-45-7, 1,8-Bis(2,5-
 diaminophenoxy)-3,6-dioxaoctane 159759-49-6 181639-60-1 187030-52-0,
 5-(4-Diethylaminophenyl)penta-2,4-dienal 187413-62-3, Basic Orange 3
 211872-02-5 215517-65-0 215517-66-1 215517-68-3 220118-56-9,
 1,2,3,3-Tetramethyl-3H-indolium-methanesulfonate 223397-50-0D, salts
 223397-66-8D, salts 223397-83-9D, salts 223397-92-0D, salts
 223398-35-4D, salts 223398-44-5D, salts 227201-32-3,
 1,5-Dioxa-9-thiaspiro[5.5]undecane-2,4-dione 260980-91-4 260980-92-5
 260980-93-6 260980-94-7 260980-95-8 260980-96-9 260980-97-0
 260980-98-1 260980-99-2 260981-00-8 260981-02-0,
 N-(2-Methoxyethyl)-p-phenylenediamine 260981-03-1, 2,3-Dichloro-p-
 phenylenediamine 262853-93-0, Piperidine-3-carboxylic acid
 278807-62-8D, salts 278807-63-9D, salts 278807-64-0D, salts
 278807-65-1D, salts 278807-66-2D, salts 278807-67-3D, salts
 278807-68-4D, salts 278807-69-5D, salts 278807-70-8D, salts
 278807-71-9D, salts 278807-72-0D, salts 278807-73-1D, salts
 278807-74-2D, salts 278807-75-3D, salts 278807-76-4D, salts
 278807-77-5D, salts 278807-78-6D, salts 278807-79-7D, salts
 278807-80-0D, salts 279214-38-9 313219-61-3 **325853-04-1**
325853-08-5 325853-09-6 341989-73-9,
 2,6-Diethoxy-4-hydroxybenzaldehyde 346593-13-3, 3-Amino-4-
 nitroacenaphthene 375856-52-3 380897-77-8 381211-44-5 503853-81-4
 503853-94-9 503854-79-3D, salts 503854-80-6D, salts 503854-82-8D,
 salts 503854-83-9D, salts 503854-84-0D, salts 503854-85-1D, salts
 503854-87-3D, salts 503854-88-4D, salts 503854-89-5D, salts
 503854-90-8D, salts 503854-91-9D, salts 503854-92-0D, salts
 503854-93-1D, salts 503854-95-3D, salts 503855-01-4D, salts
 503855-03-6D, salts 503855-05-8D, salts 503855-07-0D, salts
 503855-09-2D, salts 503856-02-8 503856-16-4 503856-17-5
 503856-18-6 506436-47-1 507484-87-9 709014-17-5 709014-18-6D,
 salts 709014-19-7D, salts 709014-20-0D, salts 709014-21-1D, salts
 709014-23-3 709014-24-4

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (hair dyes containing 1,3-dioxane-4,6-dione derivs.)

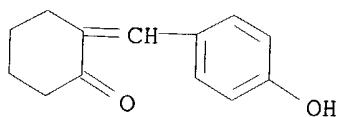
IT 16214-27-0, Indan-1,2-dione
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (hair dyes containing 1,3-dioxane-4,6-dione derivs.)

IT **61078-47-5 61078-48-6 325853-04-1**
325853-08-5 325853-09-6
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (hair dyes containing 1,3-dioxane-4,6-dione derivs.)

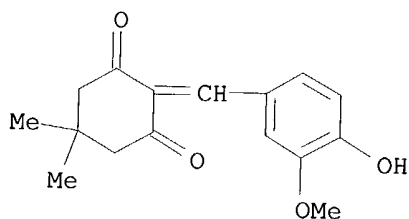
RN 61078-47-5 HCAPLUS
 CN Cyclopentanone, 2-[(4-hydroxyphenyl)methylene]- (9CI) (CA INDEX NAME)



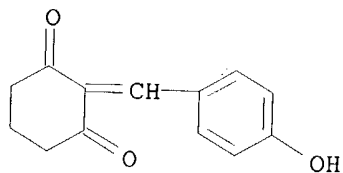
RN 61078-48-6 HCAPLUS
CN Cyclohexanone, 2-[(4-hydroxyphenyl)methylene]- (9CI) (CA INDEX NAME)



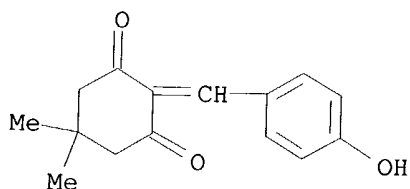
RN 325853-04-1 HCAPLUS
CN 1,3-Cyclohexanedione, 2-[(4-hydroxy-3-methoxyphenyl)methylene]-5,5-dimethyl- (9CI) (CA INDEX NAME)



RN 325853-08-5 HCAPLUS
CN 1,3-Cyclohexanedione, 2-[(4-hydroxyphenyl)methylene]- (9CI) (CA INDEX NAME)



RN 325853-09-6 HCAPLUS
CN 1,3-Cyclohexanedione, 2-[(4-hydroxyphenyl)methylene]-5,5-dimethyl- (9CI) (CA INDEX NAME)



RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

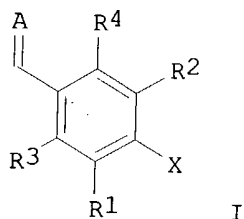
L76 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2004:305130 HCAPLUS
DN 140:326609
TI Hair dye composition comprising methine dye
IN Pratt, Dominic; Kawagishi, Toshio
PA Kao Corporation, Japan; Fuji Photo Film Co., Ltd.
SO Eur. Pat. Appl., 25 pp.
CODEN: EPXXDW

applicant

DT Patent
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1407756	A2	20040414	EP 2003-20454	20030912
	EP 1407756	A3	20040714		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	JP 2004155746	A2	20040603	JP 2002-328676	20021112
	US 2004117922	A1	20040624	US 2003-660536	20030912
PRAI	JP 2002-269173	A	20020913		
OS	MARPAT 140:326609				
GI					



AB A hair dye composition is provided containing a dissociative direct dye I
(R1-4 =

H, substituent; X = OH, NHSO₂R₅, R₅ = alkyl, aryl, heterocycle; A = divalent group capable of forming methine dye). The hair dye composition is capable of strongly dyeing the hair with a vivid color tone without causing decomposition of the dye during the dyeing process, exhibits an excellent resistance against sunlight, hair washing, perspiration, friction and heat, has a high stability against an alkali agent and an oxidizing agent, has a high dyeing property, and has less color fade after the passage of time.

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

Section cross-reference(s): 28

ST methine direct dye prepn hair coloring compn

IT Dyes

(direct; preparation and compns. of methine direct dyes for hair coloring)

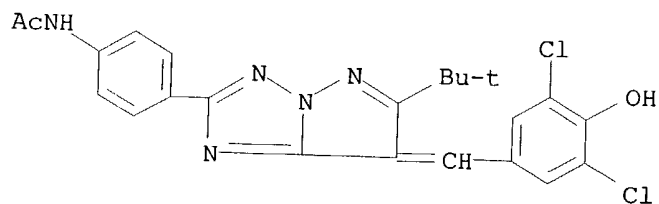
IT Hair preparations

(dyes; preparation and compns. of methine direct dyes for hair coloring)

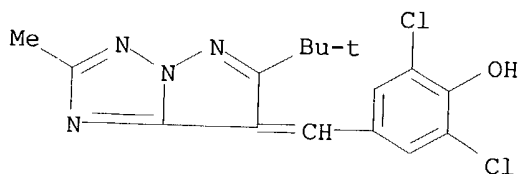
IT Cyanine dyes

(preparation and compns. of methine direct dyes for hair coloring)

IT 677751-28-9P **677751-29-0P 677751-30-3P**
 RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation and compns. of methine direct dyes for **hair** coloring)
 IT 2314-36-5, 3,5-Dichloro-4-hydroxybenzaldehyde 56278-50-3,
 2-Benzothiazolylacetonitrile 162369-79-1 677751-31-4
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation and compns. of methine direct dyes for **hair** coloring)
 IT **677751-29-0P 677751-30-3P**
 RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation and compns. of methine direct dyes for **hair** coloring)
 RN 677751-29-0 HCAPLUS
 CN Acetamide, N-[4-[7-[(3,5-dichloro-4-hydroxyphenyl)methylene]-6-(1,1-dimethylethyl)-7H-pyrazolo[1,5-b][1,2,4]triazol-2-yl]phenyl]- (9CI) (CA INDEX NAME)



RN 677751-30-3 HCAPLUS
 CN Phenol, 2,6-dichloro-4-[[6-(1,1-dimethylethyl)-2-methyl-7H-pyrazolo[1,5-b][1,2,4]triazol-7-ylidene]methyl]- (9CI) (CA INDEX NAME)



L76 ANSWER 6 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 2004:198261 HCAPLUS
 DN 140:258594
 TI Oxidative hair dyes containing 1,2-dihydropyrimidine derivatives and carbonyl derivatives of aryl and heteroaryl compounds
 IN Gross, Wibke; Mausberg, Sandra; Hoeffkes, Horst; Oberkobusch, Doris
 PA Henkel K.-G.a.A., Germany
 SO Ger. Offen., 42 pp.
 CODEN: GWXXBX
 DT Patent
 LA German
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10241076	A1	20040311	DE 2002-10241076	20020905
WO 2004022016	A1	20040318	WO 2003-EP9366	20030823

W: AU, BR, CA, CN, JP, NO, PL, RU, US, VN
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,

IT, LU, MC, NL, PT, RO, SE, SI, SK, TR
 PRAI DE 2002-10241076 A 20020905
 OS MARPAT 140:258594
 AB The invention concerns oxidative hair dyes that contain 1,2-dihydropyrimidine derivs. or their enamine forms and aryl or heteroaryl compds. with reactive carbonyl groups; further components can be added, e.g. CH-acidic compds., primary or secondary amino or hydroxy compds., aromatic hydroxy compds., primary, or secondary aromatic amines or N-heterocycles. The compns. include surfactants and optionally direct dyes and color-enhancers. Thus in a coloring experiment 3 mmol of 1,2-dihydro-1,3,4,6--tetramethyl-oxo-pyridium chloride was mixed with 0.41 g sodium acetate and 30 mL water at ca. 50°C. Before application 3 mmol 2,4-dihydrobenzaldehyde was added; pH was set to 9 with 10% sodium hydroxide. A reddish purple color was obtained.
 IC ICM A61K007-13
 CC 62-3 (Essential Oils and Cosmetics)
 ST oxidative hair dye dihydropyrimidine deriv aryl heteroaryl reactive carbonyl
 IT Surfactants
 (anionic; oxidative hair dyes containing 1,2-dihydropyrimidine derivs. and carbonyl derivs. of aryl and heteroaryl compds.)
 IT Amines, biological studies
 Nitro compounds
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (aromatic; oxidative hair dyes containing 1,2-dihydropyrimidine derivs. and carbonyl derivs. of aryl and heteroaryl compds.)
 IT Amines, biological studies
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (aryl, heterocyclic; oxidative hair dyes containing 1,2-dihydropyrimidine derivs. and carbonyl derivs. of aryl and heteroaryl compds.)
 IT Dyes
 (direct; oxidative hair dyes containing 1,2-dihydropyrimidine derivs. and carbonyl derivs. of aryl and heteroaryl compds.)
 IT Hair preparations
 (dyes, oxidative; oxidative hair dyes containing 1,2-dihydropyrimidine derivs. and carbonyl derivs. of aryl and heteroaryl compds.)
 IT Hair preparations
 (dyes; oxidative hair dyes containing 1,2-dihydropyrimidine derivs. and carbonyl derivs. of aryl and heteroaryl compds.)
 IT Aromatic compounds
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (nitro; oxidative hair dyes containing 1,2-dihydropyrimidine derivs. and carbonyl derivs. of aryl and heteroaryl compds.)
 IT Surfactants
 (nonionic; oxidative hair dyes containing 1,2-dihydropyrimidine derivs. and carbonyl derivs. of aryl and heteroaryl compds.)
 IT Oxidizing agents
 (oxidative hair dyes containing 1,2-dihydropyrimidine derivs. and carbonyl derivs. of aryl and heteroaryl compds.)
 IT Carbonyl compounds (organic), biological studies
 Hydroxy compounds
 Quaternary ammonium compounds, biological studies
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (oxidative hair dyes containing 1,2-dihydropyrimidine derivs. and carbonyl derivs. of aryl and heteroaryl compds.)
 IT Amines, biological studies
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (primary; oxidative hair dyes containing 1,2-dihydropyrimidine derivs. and carbonyl derivs. of aryl and heteroaryl compds.)

- IT Amines, biological studies
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (secondary; oxidative hair dyes containing 1,2-dihydropyrimidine derivs.
 and carbonyl derivs. of aryl and heteroaryl compds.)
- IT Surfactants
 (zwitterionic; oxidative hair dyes containing 1,2-dihydropyrimidine derivs.
 and carbonyl derivs. of aryl and heteroaryl compds.)
- IT 346684-81-9, Palatinchrome green
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (deloxidative hair dyes containing 1,2-dihydropyrimidine derivs. and
 carbonyl derivs. of aryl and heteroaryl compds.)
- IT 59-48-3, Oxindole 62-53-3, Aniline, biological studies 65-49-6,
 4-Aminosalicylic acid 66-72-8, Pyridoxal 67-52-7, Barbituric acid
 70-70-2 71-00-1, L-Histidine, biological studies 74-79-3, L-Arginine,
 biological studies 83-07-8 83-30-7, 2,4,6-Trihydroxybenzoic acid
 83-33-0, 1-Indanone 83-56-7, 1,5-Dihydroxynaphthalene 84-83-3
 86-51-1, 2,3-Dimethoxybenzaldehyde 87-02-5, 7-Amino-4-hydroxynaphthalene-
 2-sulfonic acid 87-66-1, Pyrogallol 88-21-1, 2-Aminobenzene sulfonic
 acid 88-74-4, 2-Nitroaniline 89-25-8 89-57-6, 5-Aminosalicylic acid
 89-84-9 89-86-1, 2,4-Dihydroxybenzoic acid 90-02-8,
 2-Hydroxybenzaldehyde, biological studies 90-05-1, 2-Methoxyphenol
 90-15-3, 1-Naphthol 90-20-0, 4-Amino-5-hydroxynaphthalene-2,7-disulfonic
 acid 90-44-8, Anthrone 91-29-2, 4'-Amino-4-nitrodiphenylamine-2-
 sulfonic acid 91-56-5, Isatin 91-95-2, 3,3',4,4'-Tetraaminodiphenyl
 92-44-4, 2,3-Dihydroxynaphthalene 92-65-9, N-(2-Hydroxyethyl)-N-ethyl-p-
 phenylenediamine 93-02-7, 2,5-Dimethoxybenzaldehyde 93-05-0,
 N,N-Diethyl-p-phenylenediamine 93-55-0, Propiophenone 95-01-2,
 2,4-Dihydroxybenzaldehyde 95-54-5, o-Phenylenediamine, biological
 studies 95-55-6, 2-Aminophenol 95-70-5, 2,5-Diaminotoluene 95-88-5,
 4-Chlororesorcin 96-91-3, Picramic acid 96-93-5, 3-Amino-4-hydroxy-5-
 nitrobenzene sulfonic acid 97-51-8, 2-Hydroxy-5-nitrobenzaldehyde
 98-01-1, Furfural, biological studies 98-37-3, 3-Amino-4-hydroxybenzene
 sulfonic acid 98-79-3, Pyrrolidone-5-carboxylic acid 98-86-2,
 Acetophenone, biological studies 99-05-8, 3-Aminobenzoic acid 99-07-0
 99-50-3, 3,4-Dihydroxybenzoic acid 99-56-9, 1,2-Diamino-4-nitrobenzene
 99-61-6, 3-Nitrobenzaldehyde 99-92-3 99-93-4, 4-Hydroxyacetophenone
 99-98-9, N,N-Dimethyl-p-phenylenediamine 100-01-6, 4-Nitroaniline,
 biological studies 100-10-7, 4-Dimethylaminobenzaldehyde 100-83-4,
 3-Hydroxybenzaldehyde 101-54-2, N-Phenyl-1,4-phenylenediamine
 101-77-9, 4,4'-Diaminodiphenylmethane 101-80-4, 4,4'-
 Diaminodiphenylether 102-32-9, 3,4-Dihydroxy-phenylacetic acid
 106-50-3, p-Phenylenediamine, biological studies 108-45-2,
 m-Phenylenediamine, biological studies 108-46-3, Resorcin, biological
 studies 108-72-5, 1,3,5-Triaminobenzene 108-73-6, Phloroglucin
 109-00-2, 3-Hydroxypyridine 110-89-4, Piperidine, biological studies
 116-63-2, 4-Amino-3-hydroxynaphthalene-1-sulfonic acid 117-39-5,
 Quercetin 118-12-7, 1,3,3-Trimethyl-2-methylene indoline 118-70-7,
 4,5,6-Triaminopyrimidine 118-92-3, 2-Aminobenzoic acid 118-93-4
 119-34-6, 4-Amino-2-nitrophenol 119-59-5, 4,4'-Diaminodiphenylsulfoxide
 119-61-9, Benzophenone, biological studies 119-70-0,
 4,4'-Diaminodiphenylamine-2-sulfonic acid 120-14-9, 3,4-
 Dimethoxybenzaldehyde 120-21-8, 4-Diethylaminobenzaldehyde 120-46-7,
 2-Benzoylacetophenone 120-57-0, Piperonal 120-72-9, Indole, biological
 studies 120-80-9, 1,2-Benzenediol, biological studies 121-32-4,
 3-Ethoxy-4-hydroxybenzaldehyde 121-33-5, Vanillin 121-47-1,
 3-Aminobenzene sulfonic acid 121-57-3, 4-Aminobenzene sulfonic acid
 121-71-1 122-57-6 123-08-0, 4-Hydroxybenzaldehyde 123-11-5,
 4-Methoxybenzaldehyde, biological studies 123-30-8, 4-Aminophenol
 123-31-9, Hydroquinone, biological studies 123-75-1, Pyrrolidine,

biological studies 126-81-8, 5,5-Dimethylcyclohexane-1,3-dione
 131-56-6, 2,4-Dihydroxybenzophenone 134-96-3, 4-Hydroxy-3,5-
 dimethoxybenzaldehyde 135-02-4, 2-Methoxybenzaldehyde 139-65-1,
 4,4'-Diaminodiphenylsulfide 139-85-5, 3,4-Dihydroxybenzaldehyde
 141-84-4, Rhodanine 141-86-6, 2,6-Diaminopyridine 142-08-5,
 2-Hydroxypyridine 147-85-3, L-Proline, biological studies 149-91-7,
 Gallic acid, biological studies 150-13-0, 4-Aminobenzoic acid
 150-19-6, 3-Methoxyphenol 150-75-4, 4-Methylaminophenol 150-76-5,
 4-Methoxyphenol 156-81-0, 2,4-Diaminopyrimidine 326-91-0,
 2-Thenoyltrifluoroacetone 350-03-8, 3-Acetylpyridine 387-46-2,
 2,6-Dihydroxybenzaldehyde 452-58-4, 2,3-Diaminopyridine 458-36-6,
 Coniferylaldehyde 480-66-0 486-25-9, 9-Fluorenone 487-70-7,
 2,4,6-Trihydroxybenzaldehyde 487-89-8, 1H-Indole-3-carboxaldehyde
 488-87-9, 2,5-Dimethylresorcin 490-78-8 491-38-3, Chromone 491-67-8,
 5,6,7-Trihydroxyflavone 496-15-1, Indoline 496-73-1, 4-Methylresorcin
 498-02-2 498-94-2, Piperidine-4-carboxylic acid 498-95-3,
 Piperidine-3-carboxylic acid 500-22-1, 3-Pyridinaldehyde 504-15-4
 504-17-6, Thiobarbituric acid 504-24-5, 4-Aminopyridine 520-36-5,
 4',5,7-Trihydroxyflavone 525-82-6, Flavone 528-21-2 528-75-6,
 2,4-Dinitrobenzaldehyde 533-31-3, 3,4-Methylenedioxyphenol 533-73-3,
 Hydroxyhydroquinone 535-75-1, Piperidine-2-carboxylic acid 535-87-5,
 3,5-Diaminobenzoic acid 537-65-5, 4,4'-Diaminodiphenylamine 548-83-4,
 3,5,7-Trihydroxyflavone 552-89-6, 2-Nitrobenzaldehyde 553-86-6,
 2-Coumaranone 555-16-8, 4-Nitrobenzaldehyde, biological studies
 570-24-1, 6-Nitro-o-toluidine 574-19-6 577-56-0 577-85-5,
 3-Hydroxyflavone 578-66-5, 8-Aminoquinoline 579-72-6,
 2-Dimethylaminobenzaldehyde 580-17-6, 3-Aminoquinoline 580-22-3,
 2-Aminoquinoline 582-17-2, 2,7-Dihydroxynaphthalene 586-89-0
 591-27-5, 3-Aminophenol 591-31-1, 3-Methoxybenzaldehyde 603-81-6,
 2,3-Diaminobenzoic acid 605-59-4, 1-Ethyl-4-methylquinolinium iodide
 606-23-5, 1H-Indene-1,3(2H)-dione 606-31-5, 2,6-Dinitrobenzaldehyde
 606-55-3, 1-Ethyl-2-methylquinolinium iodide 606-57-5,
 2-Amino-1-nitronaphthalene 608-08-2, 3-Indoxylacetate 608-25-3,
 2-Methylresorcin 608-97-9, Pentaaminobenzene 610-74-2,
 2,5-Diaminobenzoic acid 610-81-1, 4-Amino-3-nitrophenol 610-99-1
 611-03-0, 2,4-Diaminobenzoic acid 611-09-6, 5-Nitroisatin 611-98-3,
 4,4'-Diaminobenzophenone 611-99-4, 4,4'-Dihydroxybenzophenone
 613-45-6, 2,4-Dimethoxybenzaldehyde 613-69-4, 2-Ethoxybenzaldehyde
 614-16-4, Benzoylacetonitrile 615-66-7, 2-Chloro-p-phenylenediamine
 615-71-4, 1,2,4-Triaminobenzene 616-45-5, Pyrrolidone 616-47-7,
 1-Methylimidazole 619-05-6, 3,4-Diaminobenzoic acid 621-59-0,
 3-Hydroxy-4-methoxybenzaldehyde 621-96-5, 4,4'-Diaminostilbene
 623-30-3 626-64-2, 4-Hydroxypyridine 636-25-9, 2,5-Diaminophenol
 673-22-3, 2-Hydroxy-4-methoxybenzaldehyde 698-63-5, 5-Nitrofurfural,
 biological studies 699-83-2 703-80-0, 3-Acetylindole 704-13-2,
 3-Hydroxy-4-nitrobenzaldehyde 708-06-5, 2-Hydroxy-1-naphthaldehyde
 711-79-5 712-97-0, 6-Nitropiperonal 779-90-8, 1,3,5-Triacetylbenzene
 830-74-0, 1-Allylisatin 830-79-5, 2,4,6-Trimethoxybenzaldehyde
 832-58-6, 2,4,6-Trimethoxyacetophenone 872-85-5, 4-
 Pyridinecarboxaldehyde 873-74-5, 4-Aminobenzonitrile 876-87-9,
 1,2-Dimethylquinolinium iodide 932-16-1, 1-Methyl-2-acetylpyrrole
 934-22-5, 5-Aminobenzimidazole 943-88-4, 4-Methoxybenzylidene acetone
 950-81-2 1004-74-6, 2,4,5,6-Tetraaminopyrimidine 1004-75-7,
 4-Hydroxy-2,5,6-triaminopyrimidine 1009-61-6, 1,4-Diacetylbenzene
 1080-12-2, 4-Hydroxy-3-methoxybenzylidene acetone 1080-74-6 1121-60-4,
 2-Pyridinaldehyde 1122-54-9, 4-Acetylpyridine 1122-62-9,
 2-Acetylpyridine 1123-55-3, 7-Aminobenzothiazole 1123-93-9,
 5-Aminobenzothiazole 1125-60-6, 5-Aminoisoquinoline 1136-86-3
 1137-42-4, 4-Hydroxybenzophenone 1143-38-0, 1,8-Dihydroxyanthrone

1143-72-2, 2,3,4-Trihydroxybenzophenone 1192-58-1 1194-98-5,
 2,5-Dihydroxybenzaldehyde 1197-55-3, 4-Aminophenyl acetic acid
 1199-59-3, 4-Dimethylamino-2-methylbenzaldehyde 1204-86-0,
 4-Morpholinobenzaldehyde 1424-66-4, 2-Chloro-4-dimethylaminobenzaldehyde
 1450-75-5 1455-77-2, 3,5-Diamino-1,2,4-triazole 1466-88-2 1470-79-7,
 2,4,4'-Trihydroxybenzophenone 1483-97-2, 3,6-Diacetyl-9-ethylcarbazole
 1484-05-5, 3-Acetyl-9-methylcarbazole 1504-76-3 1571-72-8,
 3-Amino-4-hydroxybenzoic acid 1734-79-8 1820-80-0, 3-Aminopyrazole
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (oxidative hair dyes containing 1,2-dihydropyrimidine derivs. and carbonyl
 derivs. of aryl and heteroaryl compds.)
 IT 1874-22-2 1971-81-9, 4-Dimethylamino-1-naphthaldehyde 2058-74-4,
 1-Methylisatin 2089-78-3 2103-57-3, 2,3,4-Trimethoxybenzaldehyde
 2124-31-4 2144-08-3, 2,3,4-Trihydroxybenzaldehyde 2233-18-3,
 4-Hydroxy-3,5-dimethylbenzaldehyde 2291-40-9 2374-03-0,
 4-Amino-3-hydroxybenzoic acid 2478-38-8 2539-53-9,
 4-Ethoxy-3-hydroxybenzaldehyde 2654-52-6, 2,3-Dimethylbenzothiazolium-p-
 toluene sulfonate 2688-48-4, 5-Hydroxy-2-coumaranone 2688-49-5,
 2(3H)-Benzofuranone, 6-hydroxy- 2785-06-0, 2,3-Dimethylbenzothiazolium
 iodide 2835-77-0, 2-Aminobenzophenone 2835-95-2, 2-Methyl-5-
 aminophenol 2835-98-5 2835-99-6, 4-Amino-3-methylphenol 2871-01-4,
 HC Red 3 2887-61-8, 2-Hydroxybutyrophenone 3011-34-5,
 4-Hydroxy-3-nitrobenzaldehyde 3119-93-5, 3-Ethyl-2-methylbenzothiazolium
 iodide 3131-52-0, 5,6-Dihydroxyindole 3158-63-2, 1,3-
 Dimethylthiobarbituric acid 3160-35-8, 4-Hydroxybenzylidene acetone
 3160-37-0 3167-49-5, 6-Aminonicotinic acid 3198-32-1D, Benzene
 sulfonate, quaternary ammonium salts 3204-61-3, 1,2,4,5-
 Tetraaminobenzene 3215-37-0, 3-Acetylcarbazole 3240-72-0,
 2,4-Dihydroxy-5,6-diaminopyrimidine 3342-78-7, 2-Aminophenylacetic acid
 3392-97-0, 2,6-Dimethoxybenzaldehyde 3433-54-3, 6-Nitroisatin
 3565-42-2, Quinisatin 3769-62-8, Gallion 4181-05-9,
 4-Diphenylaminobenzaldehyde 4318-76-7, 2,5-Diaminopyridine 4331-29-7,
 7-Aminobenzimidazole 4335-90-4, 3-Benzylidene-2,4-pentanedione
 4363-93-3, 4-Quinolinecarboxaldehyde 4444-26-2, Hexaaminobenzene
 4460-86-0, 2,4,5-Trimethoxybenzaldehyde 4928-43-2, 2-Dimethylamino-5-
 aminopyridine 4940-39-0, Chromone-2-carboxylic acid 5007-67-0,
 3,3',4,4'-Tetraaminobenzophenone 5099-39-8, 2-[2-
 (Diethylamino)ethylamino]-5-nitroaniline 5131-58-8 5192-03-0,
 5-Aminoindole 5192-04-1, 7-Aminoindole 5192-23-4, 4-Aminoindole
 5217-47-0, 1,3-Diethylthiobarbituric acid 5260-37-7,
 3-Ethyl-2-methylbenzoxazolium iodide 5274-70-4, 2-Hydroxy-3-
 nitrobenzaldehyde 5307-02-8, 2,5-Diaminoanisole 5307-14-2,
 1,4-Diamino-2-nitrobenzene 5318-27-4, 6-Aminoindole 5345-47-1,
 2-Aminonicotinic acid 5392-12-1, 2-Methoxy-1-naphthaldehyde 5416-80-8
 5418-63-3, 1,2,3,3-Tetramethyl-3H-indolium iodide 5432-53-1,
 4-Dimethylaminobenzylidene acetone 5434-20-8, 3-Aminophthalic acid
 5434-21-9 5466-88-6, 2H-1,4-Benzoxazin-3(4H)-one 5551-11-1,
 4-Chloro-2-nitrobenzaldehyde 5556-84-3, 2,3,5-Trimethoxybenzaldehyde
 5556-86-5 5650-41-9, 3-Hydroxypropionophenone 5679-13-0,
 2-Benzylidenecyclopentanone 5682-83-7, 2-Benzylidenecyclohexanone
 5718-83-2, Rhodanine-3-acetic acid 5850-35-1, Acid blue 29 5910-23-6
 5959-52-4, 3-Amino-2-naphthoic acid 6051-53-2, 2-Hydroxybenzylidene
 acetone 6201-65-6, 2-Chlororesorcin 6203-18-5 6247-27-4, Mordant
 brown 4 6259-50-3, 6-Dimethylamino-4-hydroxy-2-naphthalene sulfonic acid
 6271-44-9, 1,2,3-Trimethylquinoxalinium iodide 6322-56-1,
 4-Hydroxy-3-nitroacetophenone 6327-79-3 6358-09-4,
 2-Amino-6-chloro-4-nitrophenol 6361-22-4, 2-Chloro-6-nitrobenzaldehyde
 6399-72-0, 6-Amino-7-hydroxynaphthalene-2-sulfonic acid 6628-04-2,
 4-Aminoquinaldine 6628-86-0, 5-Chloro-2-nitrobenzaldehyde 6633-46-1

6634-82-8, 4-Amino-4'-nitrostilbene-2,2'-disulfonic acid disodium salt
 6635-20-7, 5-Nitrovanillin 6781-42-6, 1,3-Diacetylbenzene 6967-12-0,
 6-Aminoindazole 7218-02-2 7311-34-4, 3,5-Dimethoxybenzaldehyde
 7313-70-4, 5-Sulfo-isatin 7336-20-1, Benzenesulfonic acid,
 2,2'-(1,2-ethenediyl)bis[5-amino-, disodium salt 7429-90-5D, Aluminum,
 salts 7439-89-6D, Iron, salts 7439-93-2D, Lithium, salts 7439-95-4D,
 Magnesium, salts 7439-96-5D, Manganese, salts 7440-09-7D, Potassium,
 derivs. 7440-23-5D, Sodium, salts 7440-24-6D, Strontium, salts
 7440-39-3D, Barium, salts 7440-48-4D, Cobalt, salts 7440-50-8D,
 Copper, salts 7440-66-6D, Zinc, salts 7440-70-2D, Calcium, salts
 7570-45-8 7575-35-1, N,N-Bis(2-hydroxyethyl)-p-phenylenediamine
 7722-84-1, Hydrogen peroxide, biological studies 7749-47-5,
 2-Amino-4-methoxy-6-methylpyrimidine 7768-28-7, 2-(2-Hydroxyethyl)phenol
 7770-45-8, 4-Hydroxy-1-naphthaldehyde 10031-82-0, 4-Ethoxybenzaldehyde
 10040-98-9, 4-(1-Imidazolyl)benzaldehyde 10041-06-2 10111-08-7,
 1H-Imidazole-2-carboxaldehyde 10173-66-7 10182-90-8D,
 2-Formyl-1-methylpyridinium, salts 10338-57-5, 4-Piperidinobenzaldehyde
 10342-85-5 10472-94-3 10472-95-4 13066-97-2 13441-40-2D, salts
 13505-39-0, 3-Hydroxybutyrophenone 13669-42-6, 3-Quinolinecarboxaldehyde
 13754-19-3, 4,5-Diaminopyrimidine 14268-66-7, 3,4-Methylenedioxyaniline
 14338-36-4, 3-Aminophenyl acetic acid 14501-66-7 14797-73-0D,
 Perchlorate, quaternary ammonium salts 14808-79-8D, Sulfate, quaternary
 ammonium salts 14874-70-5D, Tetrafluoroborate, quaternary ammonium salts
 14933-76-7, 3-Ethyl-2-methylbenzothiazolium-p-toluenesulfonate
 15174-69-3, 4-Hydroxy-3-methylbenzaldehyde 15201-05-5D, quaternary
 ammonium salts 15971-29-6, 4-Methoxy-1-naphthaldehyde 16053-58-0D,
 quaternary ammonium salts 16082-33-0, 3,5-Diaminopyrazole 16214-27-0,
 1H-Indene-1,2(3H)-dione 16588-34-4, 4-Chloro-3-nitrobenzaldehyde
 16634-88-1, 5-Bromo-3-nitrosalicylaldehyde 16722-51-3D, p-Toluene
 sulfonate, quaternary ammonium salts 16859-86-2, 1,4-Dimethylquinolinium
 iodide 16867-03-1, 2-Amino-3-hydroxypyridine 16887-00-6D, Chloride,
 quaternary ammonium salts 17028-61-4, 2-Hydroxy-3-methoxy-5-
 nitrobenzaldehyde 17422-74-1, Chromone-3-aldehyde 17630-76-1,
 5-Chloroisatin 17672-22-9 17754-90-4, 4-Diethylamino-2-
 hydroxybenzaldehyde 17792-58-4 18073-18-2 18278-34-7,
 4-Hydroxy-2-methoxybenzaldehyde 19005-93-7, 1H-Indole-2-carboxaldehyde
 19012-02-3, 1-Methyl-3-acetylindole 19012-03-4 19335-11-6,
 5-Aminoindazole 19735-89-8 20048-92-4, 1-Ethyl-2-methylquinolinium-p-
 toluenesulfonate 20103-09-7, 2,5-Dichloro-p-phenylenediamine
 20357-25-9, 4,5-Dimethoxy-2-nitrobenzaldehyde 20461-54-5D, Iodide,
 quaternary ammonium salts 21228-90-0D, quaternary ammonium salts
 21240-56-2 22080-96-2, 4-Hydroxy-2,6-dimethoxybenzaldehyde 22411-59-2
 22525-43-5 22715-34-0, 2-Hydroxy-4,5,6-triaminopyrimidine 22924-15-8,
 3-Ethoxybenzaldehyde 22948-94-3 23244-87-3, 2,4,5-Triaminopyridine
 23894-07-7 24677-78-9, 2,3-Dihydroxybenzaldehyde 24905-87-1, HC Red 7
 24959-67-9D, Bromide, quaternary ammonium salts 25128-32-9,
 5-Carboxyisatin 25394-13-2, Benzenesulfonic acid, 2,2'-(1,2-
 ethenediyl)bis[5-amino-, sodium salt 26153-38-8,
 3,5-Dihydroxybenzaldehyde 26216-16-0 27394-81-6, 5-(4-
 Methoxyphenyl)penta-2,4-dienal 27841-29-8, 1,2,3-Benzenetriol,
 4,6-diamino- 28020-38-4, 2,3-Diamino-6-methoxypyridine 28746-58-9
 29539-03-5, 5,6-Dihydroxyindoline 29705-39-3 31680-07-6,
 4-Methyl-3-nitrobenzaldehyde 31835-64-0, 3-Amino-3'-nitrobiphenyl
 32479-73-5, 1,3-Diethylbarbituric acid 33709-29-4 33985-71-6
 35094-87-2, 2,4,5-Trihydroxybenzaldehyde 36075-79-3D, salts 36518-76-0
 37181-39-8D, Trifluoromethane sulfonate, quaternary ammonium salts
 37705-82-1, 2,4-Diaminobenzonitrile 39755-03-8, 4-Hydroxybutyrophenone
 39755-95-8, 5-Methoxyisatin 39910-98-0 41438-18-0,
 4-Hydroxy-2-methylbenzaldehyde 41602-56-6, 4-Dimethylamino-2-

hydroxybenzaldehyde 42426-35-7 42454-06-8, 5-Hydroxy-2-nitrobenzaldehyde 42758-54-3, 4-Nitro-1-naphthaldehyde 42952-29-4 43057-77-8, 4-Ethoxy-2-hydroxybenzaldehyde 45791-64-8D, 4-Acetyl-1-methylpyridinium, salts 46791-37-1D, salts 46881-39-4D, salts 50379-28-7 50610-28-1 50899-59-7, 1-Hydroxymethylisatin 51387-92-9 51980-54-2, 4-Pyrrolidinobenzaldehyde 52943-88-1, 1-Phenyl-3-methyl-4,5-diaminopyrazole 53055-05-3, 3-Methoxy-2-nitrobenzaldehyde 54424-26-9 54424-27-0 54424-29-2 54628-24-9D, salts 55047-63-7 55302-96-0, 2-Methyl-5-(2-hydroxyethylamino)phenol 55949-38-7D, Hydroxypyrimidine, derivs. 55952-56-2, 1-Ethyl-4-methylquinolinium-p-toluenesulfonate 56932-44-6, HC Yellow 5 58028-76-5, 2-Morpholinobenzaldehyde 58380-40-8, 4-Hydroxy-2,3-dimethylbenzaldehyde 58480-17-4 60126-36-5, 3-Ethyl-2-methylbenzoxazolium-p-toluene sulfonate **61078-47-5** **61078-48-6** 61224-35-9, 1,2,3,3-Tetramethyl-3H-indolium-p-toluene sulfonate

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(oxidative hair dyes containing 1,2-dihydropyrimidine derivs. and carbonyl derivs. of aryl and heteroaryl compds.)

IT 61693-42-3, 3-Amino-2,4-dichlorophenol 62378-72-7 62496-02-0, 2-Methylamino-4,5,6-triaminopyrimidine 63053-27-0 63149-33-7 63969-46-0, Bis(5-amino-2-hydroxyphenyl)methane 64168-39-4 64993-07-3, 5-Amino-6-nitrobenzo-1,3-dioxole 65192-34-9 65192-36-1 65443-86-9 67608-58-6, 4-Amino-2-hydroxybenzonitrile 67608-59-7 67805-13-4 69471-05-2, 4-Hydroxy-2,3-dimethoxybenzaldehyde 69825-83-8, 6-Nitro-2,5-diaminopyridine 70484-29-6 70547-87-4, 4-Hydroxy-2,6-dimethylbenzaldehyde 70643-19-5, 2,4-Diaminophenoxyethanol 71134-97-9 74186-01-9, 2,3,5-Trihydroxybenzaldehyde 75965-68-3 75965-71-8 75965-84-3 77484-77-6, 3-Amino-6-methylamino-2-nitropyridine 79352-72-0, 2-Aminomethyl-4-aminophenol 79459-15-7, 3,5-Diethoxy-4-hydroxybenzaldehyde 80749-72-0, 4-Hydroxy-2,5-dimethoxybenzaldehyde 81892-72-0, 1,3-Bis(2,4-diaminophenoxy)propane 82576-75-8, HC Violet 1 83072-44-0, 2-Ethoxy-4-hydroxybenzaldehyde 83073-86-3, 5-(4-Dimethylaminophenyl)penta-2,4-dienal 83763-47-7, 2-Amino-4-(2-hydroxyethylamino)anisole 84540-47-6, 2,6-Dihydroxy-3,4-dimethylpyridine 84540-50-1, 3-Amino-2-chloro-6-methylphenol 84562-48-1, 4-Dimethylamino-2-methoxybenzaldehyde 85231-15-8, 4-Hydroxy-2,5-dimethylbenzaldehyde 85561-52-0, 1-Phenyl-4,5-diaminopyrazole 85679-78-3, 2,6-Dimethoxy-3,5-diaminopyridine 85926-99-4, 4-Hydroxyindoline 88985-64-2, 1,2-Dihydropyrimidine 90134-10-4, 4-Dibutylaminobenzaldehyde 90817-34-8, 2-Methylamino-3-amino-6-methoxypyridine 91902-53-3 93841-24-8, 2-(2,5-Diaminophenyl)ethanol 93923-57-0 95576-89-9, HC Red 10 96516-29-9, 2-Fluoro-3-nitrobenzaldehyde 101582-21-2 104202-54-2 104333-09-7, 2-Hydroxymethyl-4-aminophenol 104903-49-3 110102-86-8, 2-Methyl-5-amino-4-chlorophenol 110952-46-0 114260-09-2 114402-54-9, 1,3-Bis(4-aminophenylamino)propane 115423-85-3 115423-86-4, 1,3-Diamino-2,4-dimethoxybenzene 117907-43-4 122438-74-8D, salts 122455-85-0, 5-Amino-4-fluoro-2-methylphenol 126335-41-9, 2,5-Diaminophenetole 126335-43-1, 2-(2,5-Diaminophenoxy)ethanol 128729-30-6, 1,3-Bis[N-(4-aminophenyl)-2-hydroxyethylamino]-2-propanol 129697-50-3 130133-55-0 130582-56-8, 1,3-Bis(4-aminophenylamino)-2-propanol 137290-78-9, 5-Amino-4-methoxy-2-methylphenol 137290-86-9, 5-(2-Hydroxyethylamino)-4-methoxy-2-methylphenol 141614-04-2 141614-05-3 141922-20-5 144284-89-9 145092-00-8, 3-Amino-5-hydroxypyrazole 146658-65-3, 5-(3-Hydroxypropylamino)-2-methylphenol 147025-37-4D, salts 149330-25-6 149833-00-1D, salts 155601-17-5, 1-(2-Hydroxyethyl)-4,5-diaminopyrazole 159661-40-2 159661-41-3 159661-42-4, 2,5-Dihydroxy-4-morpholinoaniline 159661-43-5

159661-45-7, 1,8-Bis(2,5-diaminophenoxy)-3,6-dioxaoctane 159759-49-6
 176742-32-8, Basic Brown 17 187030-52-0, 5-(4-Diethylaminophenyl)penta-
 2,4-dienal 211872-02-5 215517-65-0 215517-66-1 215517-68-3
 220118-56-9, 1,2,3,3-Tetramethyl-3H-indolium-methane sulfonate 223397-50
 -OD, salts 223397-66-8D, salts 223397-83-9D, salts 223397-92-OD,
 salts 223398-35-4D, salts 223398-44-5D, salts 260980-91-4
 260980-92-5 260980-93-6 260980-94-7 260980-95-8 260980-96-9
 260980-97-0 260980-98-1 260980-99-2 260981-00-8 260981-02-0,
 N-(2-Methoxyethyl)-p-phenylenediamine 260981-03-1, 2,3-Dichloro-p-
 phenylenediamine 278807-62-8D, salts 278807-63-9D, salts
 278807-64-OD, salts 278807-65-1D, salts 278807-66-2D, salts
 278807-67-3D, salts 278807-68-4D, salts 278807-69-5D, salts
 278807-70-8D, salts 278807-71-9D, salts 278807-72-OD, salts
 278807-73-1D, salts 278807-74-2D, salts 278807-75-3D, salts
 278807-76-4D, salts 278807-77-5D, salts 278807-78-6D, salts
 278807-79-7D, salts 278807-80-OD, salts 279214-38-9 313219-61-3

325853-04-1 325853-08-5 325853-09-6

341989-73-9, 2,6-Diethoxy-4-hydroxybenzaldehyde 346593-13-3,
 3-Amino-4-nitro-acenaphthene 375856-52-3 380897-75-6 503853-81-4
 503853-94-9 503854-79-3D, salts 503854-80-6D, salts 503854-82-8D,
 salts 503854-83-9D, salts 503854-84-OD, salts 503854-85-1D, salts
 503854-87-3D, salts 503854-88-4D, salts 503854-89-5D, salts
 503854-90-8D, salts 503854-91-9D, salts 503854-92-OD, salts
 503854-93-1D, salts 503854-95-3D, salts 503854-98-6D, salts
 503855-00-3D, salts 503855-01-4D, salts 503855-03-6D, salts
 503855-05-8D, salts 503855-07-OD, salts 503855-11-6D, salts
 503856-02-8 503856-17-5 503856-18-6 504433-02-7 506436-47-1
 507484-87-9 669057-57-2 669057-58-3 669057-59-4 669057-60-7
 669057-62-9 669057-64-1 669057-66-3 669057-67-4 669057-68-5
 669057-69-6 669057-71-0 669057-72-1 669057-74-3 669057-75-4
 669057-77-6 669057-78-7 669057-79-8 669057-80-1 669057-81-2
 669057-82-3 669057-83-4 669057-84-5 669057-86-7 669057-88-9
 669057-90-3 669057-91-4 669057-93-6 669057-94-7 669057-96-9
 669057-97-0 669057-99-2 669058-00-8 669058-02-0 669058-03-1
 669058-04-2 669058-05-3 669058-06-4 669058-10-OD, salts

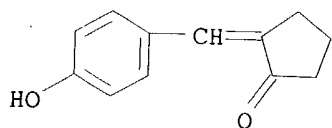
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (oxidative hair dyes containing 1,2-dihydropyrimidine derivs. and
 carbonyl derivs. of aryl and heteroaryl compds.)

IT **61078-47-5 61078-48-6 325853-04-1**
325853-08-5 325853-09-6

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (oxidative hair dyes containing 1,2-dihydropyrimidine derivs. and
 carbonyl derivs. of aryl and heteroaryl compds.)

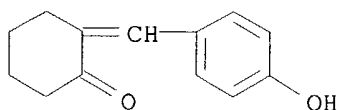
RN 61078-47-5 HCAPLUS

CN Cyclopentanone, 2-[(4-hydroxyphenyl)methylene]- (9CI) (CA INDEX NAME)

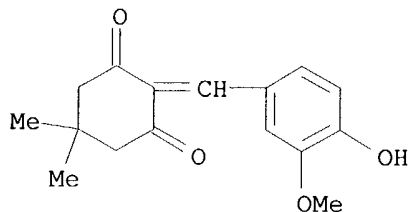


RN 61078-48-6 HCAPLUS

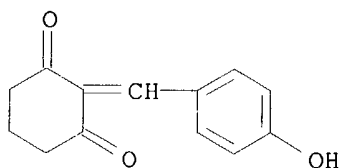
CN Cyclohexanone, 2-[(4-hydroxyphenyl)methylene]- (9CI) (CA INDEX NAME)



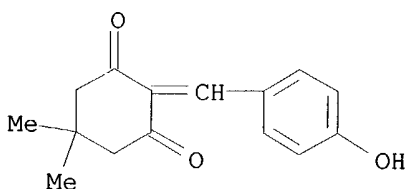
RN 325853-04-1 HCAPLUS
CN 1,3-Cyclohexanedione, 2-[(4-hydroxy-3-methoxyphenyl)methylene]-5,5-dimethyl- (9CI) (CA INDEX NAME)



RN 325853-08-5 HCAPLUS
CN 1,3-Cyclohexanedione, 2-[(4-hydroxyphenyl)methylene]- (9CI) (CA INDEX NAME)



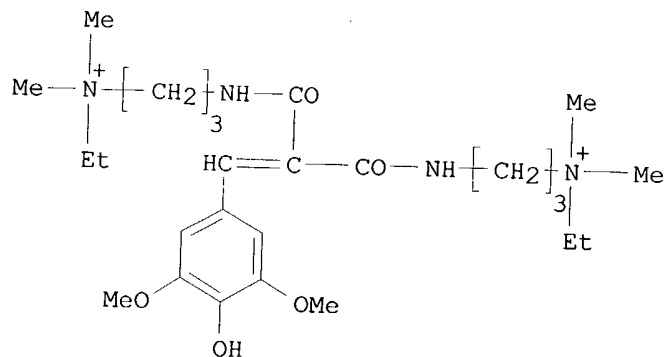
RN 325853-09-6 HCAPLUS
CN 1,3-Cyclohexanedione, 2-[(4-hydroxyphenyl)methylene]-5,5-dimethyl- (9CI) (CA INDEX NAME)



L76 ANSWER 7 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:818390 HCAPLUS
DN 139:327935
TI Photostable cationic organic sunscreen compounds with antioxidant properties and hair compositions containing them
IN Chaudhuri, Ratan K.
PA Merck Patent G.m.b.H., Germany
SO PCT Int. Appl., 49 pp.
CODEN: PIXXD2

DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003084920	A1	20031016	WO 2003-EP3182	20030327
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 2003198607	A1	20031023	US 2002-119025	20020410
	US 6699463	B2	20040302		
PRAI	US 2002-119025	A	20020410		
OS	MARPAT 139:327935				
GI					



I

2 EtO—SO₃⁻

- AB Compds. such as I and similar compds. were prepared Hair care formulations and shampoos were prepared containing I and similar compds. Methods for protecting hair and substrates such as polymers, textiles, fabrics, leathers and paints with the compds. are discussed.
- IC ICM C07C235-80
ICS C07C255-41; C07C235-34; A61K007-42
- CC 62-3 (Essential Oils and Cosmetics)
Section cross-reference(s): 25
- ST cinnamide quaternary ammonium deriv prepn sunscreen hair
- IT Hair preparations
Shampoos
Sunscreens
(photostable cationic organic sunscreen compds. with antioxidant properties and hair compns. containing them)
- IT Quaternary ammonium compounds, biological studies

RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(photostable cationic organic sunscreen compds. with antioxidant properties and hair compns. containing them)

IT 612493-37-5P 612493-39-7P 612493-41-1P
612493-43-3P

RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(photostable cationic organic sunscreen compds. with antioxidant properties and hair compns. containing them)

IT 86-81-7, 3,4,5-Trimethoxybenzaldehyde 105-56-6, Ethyl cyanoacetate
51323-71-8, Dodecyl mesylate

RL: RCT (Reactant); RACT (Reactant or reagent)
(photostable cationic organic sunscreen compds. with antioxidant properties and hair compns. containing them)

IT 134-96-3P, Syringaldehyde 14962-03-9P 15029-09-1P 612493-44-4P
612493-45-5P

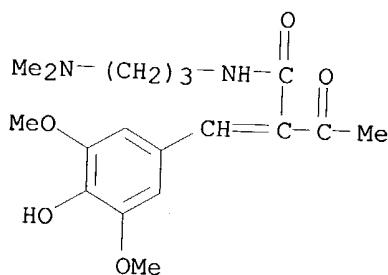
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(photostable cationic organic sunscreen compds. with antioxidant properties and hair compns. containing them)

IT 612493-37-5P 612493-39-7P 612493-41-1P
612493-43-3P

RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(photostable cationic organic sunscreen compds. with antioxidant properties and hair compns. containing them)

RN 612493-37-5 HCAPLUS

CN Butanamide, N-[3-(dimethylamino)propyl]-2-[(4-hydroxy-3,5-dimethoxyphenyl)methylene]-3-oxo- (9CI) (CA INDEX NAME)



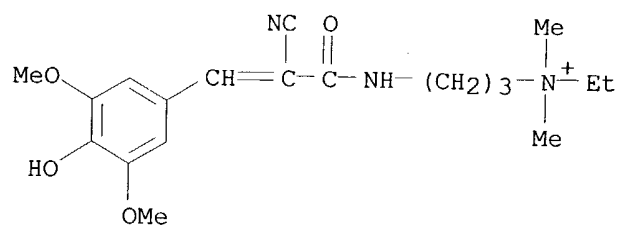
RN 612493-39-7 HCAPLUS

CN 1-Propanaminium, 3-[[2-cyano-3-(4-hydroxy-3,5-dimethoxyphenyl)-1-oxo-2-propenyl]amino]-N-ethyl-N,N-dimethyl-, ethyl sulfate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 612493-38-6

CMF C19 H28 N3 O4



CM 2

CRN 48028-76-8

CMF C2 H5 O4 S

Et-O-SO₃⁻

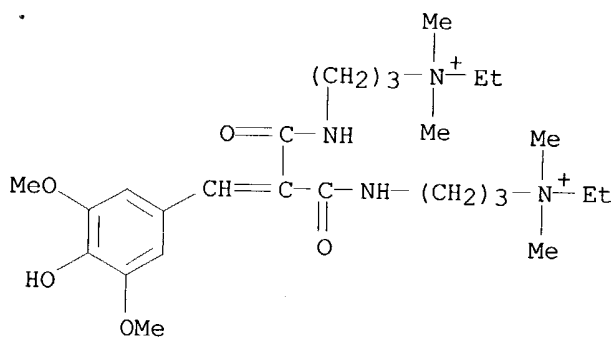
RN 612493-41-1 HCAPLUS

CN 1-Propanaminium, 3,3'-[[2-[(4-hydroxy-3,5-dimethoxyphenyl)methylene]-1,3-dioxo-1,3-propanediyl]diimino]bis[N-ethyl-N,N-dimethyl-, bis(ethyl sulfate) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 612493-40-0

CMF C26 H46 N4 O5



CM 2

CRN 48028-76-8

CMF C2 H5 O4 S

Et-O-SO₃⁻

RN 612493-43-3 HCAPLUS

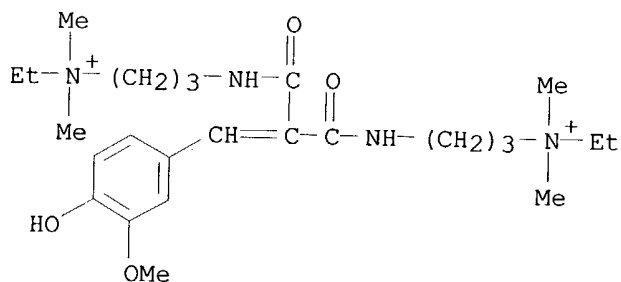
CN 1-Propanaminium, 3,3'-[[2-[(4-hydroxy-3-methoxyphenyl)methylene]-1,3-dioxo-1,3-propanediyl]diimino]bis[N-ethyl-N,N-dimethyl-, bis(ethyl sulfate)

(salt) (9CI) (CA INDEX NAME)

CM 1

CRN 612493-42-2

CMF C25 H44 N4 O4



CM 2

CRN 48028-76-8

CMF C2 H5 O4 S

$$\text{Et}-\text{O}-\text{SO}_3^-$$

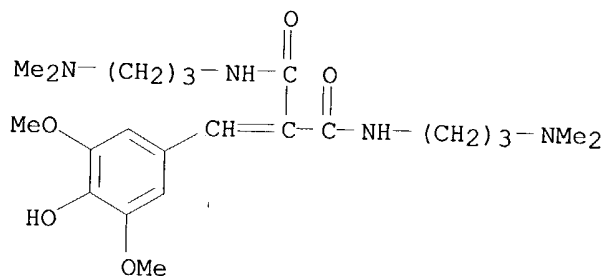
IT 612493-45-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(photostable cationic organic sunscreen compds. with antioxidant properties and **hair** compns. containing them)

RN 612493-45-5 HCAPLUS

CN Propanediamide, N,N'-bis[3-(dimethylamino)propyl]-2-[(4-hydroxy-3,5-dimethoxyphenyl)methylene]- (9CI) (CA INDEX NAME)



RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L76 ANSWER 8 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2003-282162 HCAPLUS

AN 2003:282163 HCAPLUS

DN 138:292390

TI Oxidative hair dyes containing 2-arylidene-3-indolinone compounds

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

IN Moeller, Hinrich; Oberkobusch, Doris; Hoeffkes, Horst
 PA Henkel Kommanditgesellschaft Auf Aktien, Germany
 SO Eur. Pat. Appl., 20 pp.
 CODEN: EPXXDW

DT Patent
 LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1300135	A1	20030409	EP 2002-21430	20020925
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
	DE 10148846	A1	20030410	DE 2001-10148846	20011004
PRAI	DE 2001-10148846	A	20011004		
OS	MARPAT 138:292390				

AB The invention concerns oxidative hair dyes containing 2-arylidene-3-indolinone compds. and other components selected from the group of (a) primary or secondary aryl amines, hydroxy compds., N-containing heteroaryls; (b) amino acids; (c) CH-acids. Direct dyes and color intensifiers can be added. Thus in a hair dyeing experiment 5 mmol 4-(3-oxo-2-indolinyldenemethyl)-1-methylpyridinium iodide and 5 mmol 2,5-diaminotoluene H2SO4 were mixed with 5 mmol sodium acetate in 50 mL water; pH 6 was set; intense violet red color was obtained.

IC ICM A61K007-13
 ICS D06P003-14

CC 62-3 (Essential Oils and Cosmetics)

ST oxydative hair dye arylidene indolinone

IT Surfactants

(anionic; oxidative hair dyes containing 2-arylidene-3-indolinone compds.)

IT Amines, biological studies

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(aromatic; oxidative hair dyes containing 2-arylidene-3-indolinone compds.)

IT Amines, biological studies

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(aryl, secondary; oxidative hair dyes containing 2-arylidene-3-indolinone compds.)

IT Dyes

(direct; oxidative hair dyes containing 2-arylidene-3-indolinone compds.)

IT Hair preparations

(dyes, oxidative; oxidative hair dyes containing 2-arylidene-3-indolinone compds.)

IT Hair preparations

(dyes; oxidative hair dyes containing 2-arylidene-3-indolinone compds.)

IT Surfactants

(nonionic; oxidative hair dyes containing 2-arylidene-3-indolinone compds.)

IT Amino acids, biological studies

Heterocyclic compounds

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(oxidative hair dyes containing 2-arylidene-3-indolinone compds.)

IT Surfactants

(zwitterionic; oxidative hair dyes containing 2-arylidene-3-indolinone compds.)

IT 50-21-5D, salts 59-48-3 59-92-7, biological studies 60-18-4,
 L-Tyrosine, biological studies 60-32-2 62-53-3, Benzenamine,
 biological studies 63-91-2, L-Phenylalanine, biological studies
 64-18-6D, Formic acid, salts 64-19-7D, Acetic acid, salts 65-49-6
 67-52-7, 2,4,6(1H,3H,5H)-Pyrimidinetrione 70-26-8, L-Ornithine
 71-00-1, L-Histidine, biological studies 73-22-3, L-Tryptophan,
 biological studies 74-79-3, L-Arginine, biological studies 79-09-4D,

Propanoic acid, salts 79-14-1D, salts 83-07-8 83-30-7 83-33-0
 83-56-7, 1,5-Naphthalenediol 87-02-5 87-66-1, 1,2,3-Benzenetriol
 88-21-1 88-74-4 89-25-8 89-57-6 89-86-1 90-05-1 90-15-3,
 1-Naphthalenol 90-20-0 91-29-2 91-95-2, [1,1'-Biphenyl]-3,3',4,4'-
 tetramine 92-44-4, 2,3-Naphthalenediol 93-05-0 95-54-5,
 1,2-Benzenediamine, biological studies 95-55-6 95-70-5 95-88-5
 96-91-3 96-93-5 98-37-3 98-79-3 99-07-0 99-31-0 99-50-3
 99-56-9 99-98-9 100-01-6, biological studies 101-54-2 101-77-9
 101-80-4 102-32-9 106-50-3, 1,4-Benzenediamine, biological studies
 107-92-6D, Butanoic acid, salts 107-95-9, . β -Alanine 108-45-2,
 1,3-Benzenediamine, biological studies 108-46-3, 1,3-Benzenediol,
 biological studies 108-72-5, 1,3,5-Benzenetriamine 108-73-6,
 1,3,5-Benzenetriol 109-00-2, 3-Pyridinol 110-85-0, Piperazine,
 biological studies 110-86-1, Pyridine, biological studies 110-89-4,
 Piperidine, biological studies 116-63-2 118-12-7 118-70-7,
 4,5,6-Pyrimidinetriamine 118-92-3 119-34-6 119-59-5 119-70-0
 120-72-9, 1H-Indole, biological studies 120-72-9D, 1H-Indole, derivs.
 120-80-9, Pyrocatechol, biological studies 121-47-1 121-57-3
 123-30-8 123-31-9, 1,4-Benzenediol, biological studies 123-75-1,
 Pyrrolidine, biological studies 139-65-1 141-84-4 141-86-6,
 2,6-Pyridinediamine 142-08-5, 2(1H)-Pyridinone 142-62-1D, Hexanoic
 acid, salts 147-85-3, L-Proline, biological studies 149-91-7,
 biological studies 150-13-0 150-19-6 150-75-4 150-76-5 156-81-0,
 2,4-Pyrimidinediamine 288-13-1, 1H-Pyrazole 288-32-4, 1H-Imidazole,
 biological studies 288-88-0, 1H-1,2,4-Triazole 452-58-4,
 2,3-Pyridinediamine 462-08-8, 3-Aminopyridine 488-87-9 496-73-1
 498-94-2, 4-Piperidinecarboxylic acid 498-95-3, 3-Piperidinecarboxylic
 acid 504-15-4 504-17-6 504-24-5, 4-Pyridinamine 504-29-0,
 2-Aminopyridine 533-31-3, 1,3-Benzodioxol-5-ol 533-73-3,
 1,2,4-Benzenetriol 535-75-1, 2-Piperidinecarboxylic acid 535-87-5
 537-65-5 553-86-6, 2(3H)-Benzofuranone 556-03-6, Tyrosine 570-24-1
 578-66-5, 8-Quinolinamine 580-17-6, 3-Quinolinamine 580-22-3,
 2-Quinolinamine 582-17-2, 2,7-Naphthalenediol 591-27-5 603-81-6
 606-23-5, Indan-1,3-dione 606-55-3 606-57-5 608-08-2 608-25-3
 608-97-9, Benzenepentamine 610-74-2 610-81-1 611-03-0 611-98-3
 614-16-4 615-50-9 615-66-7 615-71-4, 1,2,4-Benzenetriamine
 616-45-5, 2-Pyrrolidinone 616-47-7 619-05-6 621-96-5 626-64-2,
 4-Pyridinol 636-25-9 873-74-5 876-87-9 934-22-5,
 1H-Benzimidazol-5-amine 1004-74-6, Pyrimidinetetramine 1004-75-7
 1080-74-6 1123-55-3, 7-Benzothiazolamine 1123-93-9,
 5-Benzothiazolamine 1125-60-6, 5-Isoquinolinamine 1197-55-3
 1455-77-2, 1H-1,2,4-Triazole-3,5-diamine 1571-72-8 1820-80-0,
 1H-Pyrazol-3-amine 2654-52-6 2785-06-0 2835-95-2 2835-98-5
 2835-99-6 2871-01-4 3131-52-0, 1H-Indole-5,6-diol 3158-63-2
 3167-49-5 3204-61-3, 1,2,4,5-Benzenetetramine 3240-72-0 3260-61-5D,
 3-Indolinone, 2-arylidene derivs. 3342-78-7 3468-11-9 3769-62-8
 3812-32-6D, Carbonate, salts 4318-76-7, 2,5-Pyridinediamine 4331-29-7,
 1H-Benzimidazol-4-amine 4444-26-2, Benzenhexamine 4928-43-2
 5007-67-0 5099-39-8 5131-58-8 5192-03-0, 1H-Indol-5-amine
 5192-04-1, 1H-Indol-7-amine 5192-23-4, 1H-Indol-4-amine 5217-47-0
 5307-02-8 5307-14-2 5318-27-4, 1H-Indol-6-amine 5345-47-1
 5418-63-3, 1,2,3,3-Tetramethyl-3H-indoliumiodide 5434-20-8 5718-83-2
 5850-35-1 5930-28-9, 4-Amino-2,6-dichlorophenol 5959-52-4 6093-67-0
 6093-68-1 6201-65-6 6259-50-3 6358-09-4 6399-72-0 6628-04-2
 6634-82-8 6967-12-0, 1H-Indazol-6-amine 7218-02-2 7336-20-1
 7429-90-5D, Aluminum, salts 7439-89-6D, Iron, salts 7439-93-2D,
 Lithium, salts 7439-95-4D, Magnesium, salts 7439-96-5D, Manganese,
 salts 7440-09-7D, Potassium, salts 7440-23-5D, Sodium, salts
 7440-24-6D, Strontium, salts 7440-39-3D, Barium, salts 7440-48-4D,

Cobalt, salts 7440-50-8D, Copper, salts 7440-66-6D, Zinc, salts 7440-70-2D, Calcium, salts 7575-35-1 7664-38-2D, Phosphoric acid, salts 7722-84-1, Hydrogen peroxide, biological studies 7749-47-5, 7768-28-7 10023-74-2D, Valerate, salts 10173-66-7 12236-29-2 13066-97-2 13598-36-2D, Phosphonic acid, salts 13754-19-3, 4,5-Pyrimidinediamine 14268-66-7, 3,4-Methylenedioxyaniline 14338-36-4 14798-03-9D, Ammonium, salts 14808-79-8D, Sulfate, salts 16082-33-0, 1H-Pyrazole-3,5-diamine 16214-27-0, Indan-1,2-dione 16859-86-2 16867-03-1 17672-22-9 19298-14-7 19335-11-6, 1H-Indazol-5-amine 20048-92-4 20103-09-7 22525-43-5 22715-34-0

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(oxidative hair dyes containing 2-arylidene-3-indolinone compds.)

IT 23244-87-3, 2,4,5-Pyridinetriamine 23894-07-7 24905-87-1 26216-16-0
 27074-03-9 27841-29-8 28020-38-4 28141-13-1 29539-03-5
 29705-39-3 31835-64-0 32479-73-5 36429-85-3 36518-76-0
 37705-82-1 38172-19-9 39830-75-6 39830-76-7 **39830-77-8**
 41946-53-6 42952-26-1 50610-28-1 51387-92-9 52943-88-1
 53277-21-7 54381-16-7 55302-96-0 55949-38-7D, Pyrimidinol, derivs.
 56216-28-5 56932-44-6 57211-29-7 57211-37-7 58480-17-4
 61224-35-9 61693-42-3 62496-02-0 63969-46-0 64993-07-3
 66566-48-1 66635-40-3 67608-58-6 67608-59-7 68305-30-6
 68391-32-2 70643-19-5 71134-97-9 77484-77-6 79352-72-0
 80030-92-8 81892-72-0 82576-75-8 83763-47-7 84540-47-6
 84540-50-1 85561-52-0 85679-78-3 85926-99-4 90335-90-3
 90817-34-8 93841-24-8 93923-57-0 95576-89-9 96923-50-1
 104333-09-7 104903-49-3 110102-86-8 110952-46-0 110952-48-2
 114260-09-2 114402-54-9 115423-85-3 115423-86-4 117907-43-4
 118860-71-2 118860-72-3 118860-74-5 118860-75-6 118860-76-7
 118860-80-3 118860-81-4 118860-82-5 118860-84-7 118860-85-8
 122455-85-0 126335-41-9 126335-43-1 128729-30-6 129697-50-3
 130582-56-8 135043-64-0 137290-78-9 137290-86-9 141614-04-2
 141614-05-3 141922-20-5 145092-00-8 146658-65-3 149330-25-6
 155601-17-5 159661-40-2 159661-41-3 159661-42-4 159661-43-5
 159661-45-7 211872-02-5 220118-56-9 313219-61-3 322727-81-1
 346593-13-3 375856-52-3 503853-76-7 503856-02-8 503856-16-4
 503856-17-5 507224-77-3 **507277-71-6** 507277-72-7
 507277-73-8 507277-74-9 507277-75-0 507277-76-1 507277-77-2
 507277-78-3 507277-80-7 507277-81-8 507277-82-9

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(oxidative hair dyes containing 2-arylidene-3-indolinone compds.)

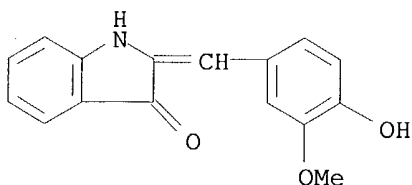
IT **39830-77-8 507277-71-6**

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(oxidative hair dyes containing 2-arylidene-3-indolinone compds.)

RN 39830-77-8 HCAPLUS

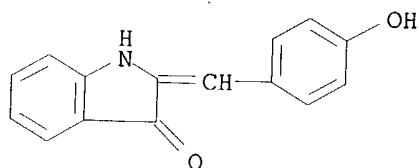
CN 3H-Indol-3-one, 1,2-dihydro-2-[(4-hydroxy-3-methoxyphenyl)methylene]-
 (9CI) (CA INDEX NAME)



RN 507277-71-6 HCAPLUS

CN 3H-Indol-3-one, 1,2-dihydro-2-[(4-hydroxyphenyl)methylene]- (9CI) (CA

INDEX NAME)



RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L76 ANSWER 9 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:278305 HCAPLUS
DN 138:308932
TI Hair dyes containing aromatic or heteroaromatic aldehydes and ketones in
combination with other dyes and color intensifiers
IN Moeller, Hinrich; Oberkobusch, Doris
PA Henkel K.-G.a.A., Germany
SO Ger. Offen., 20 pp.
CODEN: GWXXBX
DT Patent
LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 10148847	A1	20030410	DE 2001-10148847	20011004
	WO 2003030845	A1	20030417	WO 2002-EP10730	20020925
	WO 2003030845	C1	20040115		
	W: AU, BR, CA, CN, HU, JP, NO, PL, RU, US, VN				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR				
	EP 1434557	A1	20040707	EP 2002-777201	20020925
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR, BG, CZ, EE, SK				
PRAI	DE 2001-10148847	A	20011004		
	WO 2002-EP10730	W	20020925		
OS	MARPAT 138:308932				
AB	The invention concerns hair dyes that contain aromatic or heteroarom. aldehydes and ketones and 4-aminopyrazoline-5-one derivs. Further components are selected from the group of primary and secondary aromatic amines, hydroxydes, nitrogen-containing heterocycles, amino acids etc. Thus in a dyeing experiment 5 mmol 4-formyl-1-methylpyridinium benzene sulfonate and 5 mmol 4-aminoantipyrine were mixed and pH 6 was set with sodium hydroxide; an intensive gold-yellow color was obtained.				
IC	ICM A61K007-13				
CC	62-3 (Essential Oils and Cosmetics)				
ST	hair dye arom heteroarom aldehyde ketone aminoantipyrine				
IT	Surfactants (anionic; hair dyes containing aromatic or heteroarom. aldehydes and ketones in combination with other dyes and color intensifiers)				
IT	Aldehydes, biological studies Ketones, biological studies RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (aromatic; hair dyes containing aromatic or heteroarom. aldehydes and ketones in combination with other dyes and color intensifiers)				

- IT Hair preparations
(dyes; hair dyes containing aromatic or heteroarom. aldehydes and ketones in combination with other dyes and color intensifiers)
- IT Oxidizing agents
(hair dyes containing aromatic or heteroarom. aldehydes and ketones in combination with other dyes and color intensifiers)
- IT Aldehydes, biological studies
Amines, biological studies
Caseins, biological studies
Collagens, biological studies
Elastins
Keratins
Ketones, biological studies
Proteins
Quaternary ammonium compounds, biological studies
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(hair dyes containing aromatic or heteroarom. aldehydes and ketones in combination with other dyes and color intensifiers)
- IT Ketones, biological studies
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(heteroarom.; hair dyes containing aromatic or heteroarom. aldehydes and ketones in combination with other dyes and color intensifiers)
- IT Aldehydes, biological studies
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(heteroaryl; hair dyes containing aromatic or heteroarom. aldehydes and ketones in combination with other dyes and color intensifiers)
- IT Surfactants
(nonionic; hair dyes containing aromatic or heteroarom. aldehydes and ketones in combination with other dyes and color intensifiers)
- IT Proteins
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(soybean; hair dyes containing aromatic or heteroarom. aldehydes and ketones in combination with other dyes and color intensifiers)
- IT Protein hydrolyzates
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(wheat gluten; hair dyes containing aromatic or heteroarom. aldehydes and ketones in combination with other dyes and color intensifiers)
- IT Glutens
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(wheat, hydrolyzates; hair dyes containing aromatic or heteroarom. aldehydes and ketones in combination with other dyes and color intensifiers)
- IT Surfactants
(zwitterionic; hair dyes containing aromatic or heteroarom. aldehydes and ketones in combination with other dyes and color intensifiers)
- IT 56-87-1, L-Lysine, biological studies 59-48-3, Oxindol 59-92-7, biological studies 60-18-4, L-Tyrosine, biological studies 62-53-3, Benzenamine, biological studies 63-91-2, L-Phenylalanine, biological studies 65-49-6 66-72-8, Pyridoxal 67-52-7, Barbituric acid 70-18-8, Glutathione, biological studies 70-26-8, L-Ornithine 70-70-2 71-00-1, L-Histidine, biological studies 73-22-3, L-Tryptophan, biological studies 74-79-3, L-Arginine, biological studies 77-32-7 82-86-0, Acenaphthylenequinone 83-07-8 83-30-7 83-33-0 83-56-7, 1,5-Naphthalenediol 84-83-3 85-26-7, Salicil 87-02-5 87-66-1, Pyrogallol 88-21-1 88-74-4 89-57-6 89-84-9 89-86-1 90-02-8, Salicylaldehyde, biological studies 90-05-1 90-15-3, 1-Naphthalenol 90-20-0 90-44-8, Anthrone 91-29-2 91-56-5, 1H-Indole-2,3-dione 92-44-4, 2,3-Naphthalenediol 92-65-9 93-55-0, Propiophenone 95-01-2, 2,4-Dihydroxybenzaldehyde 95-54-5, 1,2-Benzenediamine, biological

studies 95-55-6 95-70-5 95-88-5 96-91-3 96-93-5 97-51-8
 98-01-1, 2-Furancarboxaldehyde, biological studies 98-37-3 98-86-2,
 Acetophenone, biological studies 99-05-8 99-07-0 99-31-0 99-50-3
 99-56-9 99-61-6 99-92-3 99-93-4, 4-Hydroxyacetophenone 100-01-6,
 biological studies 100-10-7, 4-Dimethylaminobenzaldehyde 101-77-9
 101-80-4 102-32-9 106-50-3, 1,4-Benzenediamine, biological studies
 107-95-9, β -Alanine 108-45-2, 1,3-Benzenediamine, biological
 studies 108-46-3, 1,3-Benzenediol, biological studies 108-72-5,
 1,3,5-Benzenetriamine 108-73-6, Phloroglucin 109-00-2, 3-Pyridinol
 110-85-0, Piperazidine, biological studies 110-86-1, Pyridine,
 biological studies 110-89-4, Piperidine, biological studies 116-63-2
 117-39-5, Quercetin 118-12-7 118-70-7, 4,5,6-Pyrimidinetriamine
 118-92-3 118-93-4 119-34-6 119-59-5 119-61-9, Benzophenone,
 biological studies 119-70-0 119-72-2 120-21-8, 4-
 Diethylaminobenzaldehyde 120-46-7 120-80-9, Pyrocatechin, biological
 studies 121-33-5, Vanillin 121-47-1 121-57-3 121-71-1 122-57-6
 123-30-8 123-31-9, Hydroquinone, biological studies 123-75-1,
 Pyrrolidine, biological studies 131-56-6, 2,4-DiHydroxyBenzophenone
 134-81-6, Benzil 139-65-1 141-84-4 141-86-6, 2,6-Pyridinediamine
 142-08-5, 2(1H)-Pyridinone 147-85-3, L-Proline, biological studies
 149-87-1 149-91-7, biological studies 150-13-0 150-19-6 150-75-4
 150-76-5 156-81-0, 2,4-Pyrimidinediamine 288-13-1, 1H-Pyrazole
 288-32-4, 1H-Imidazole, biological studies 288-88-0, 1H-1,2,4-Triazole
 326-91-0 350-03-8 452-58-4, 2,3-Pyridinediamine 458-36-6,
 Coniferylaldehyde 462-08-8, 3-Pyridinamine 480-66-0 486-25-9,
 9-Fluorenone 487-89-8, 1H-Indole-3-carboxaldehyde 488-87-9 490-78-8
 491-38-3, Chromone 491-67-8, 5,6,7-TriHydroxyFlavone 492-73-9,
 2,2'-Pyridil 492-94-4, 2,2'-Furil 498-02-2 498-94-2, Piperidine
 4-carboxylic acid 498-95-3, Piperidine 3-carboxylic acid 500-22-1,
 3-Pyridinecarboxaldehyde 504-17-6, Thiobarbituric acid 504-24-5,
 4-Pyridinamine 504-29-0, 2-Pyridinamine 517-22-6 520-36-5,
 4',5,7-TriHydroxyFlavone 525-82-6, Flavone 528-21-2 533-31-3,
 1,3-Benzodioxol-5-ol 533-73-3, Hydroxyhydroquinone 535-75-1,
 Piperidine 2-carboxylic acid 535-87-5 537-65-5 548-83-4,
 3,5,7-TriHydroxyFlavone 552-89-6 553-86-6, Cumarone 555-16-8,
 biological studies 556-03-6, Tyrosine 570-24-1 574-19-6 577-56-0
 577-85-5, 3-HydroxyFlavone 578-66-5, 8-Quinolinamine 579-72-6
 580-17-6, 3-Quinolinamine 580-22-3, 2-Quinolinamine 582-17-2,
 2,7-Naphthalenediol 586-89-0 591-27-5 603-81-6 606-23-5,
 1H-Indene-1,3(2H)-dione 606-31-5 606-55-3 606-57-5 608-08-2,
 3-Indoxyl acetate 610-74-2 610-81-1 611-03-0 611-09-6 611-98-3
 611-99-4, 4,4'-DiHydroxyBenzophenone 614-82-4 615-66-7 615-71-4,
 1,2,4-Benzenetriamine 616-45-5, 2-Pyrrolidinone 616-47-7 619-05-6
 623-09-6 623-30-3 626-64-2, 4-Pyridinol 636-25-9 698-63-5,
 biological studies 699-83-2 703-80-0 704-13-2 711-79-5 712-97-0
 771-50-6, 1H-Indole-3-carboxylic acid 779-90-8 830-74-0 832-58-6,
 2,4,6-Trimethoxyacetophenone 872-85-5, 4-Pyridinecarboxaldehyde
 932-16-1 934-22-5, 1H-Benzimidazol-5-amine 943-88-4 950-81-2
 1004-74-6, Pyrimidinetetramine 1009-61-6 1080-12-2 1121-60-4,
 2-Pyridinecarboxaldehyde 1122-54-9 1122-62-9 1123-55-3,
 7-Benzothiazolamine 1123-93-9, 5-Benzothiazolamine 1125-60-6,
 5-Isoquinolinamine 1136-86-3 1137-42-4, 4-HydroxyBenzophenone
 1143-38-0, 1,8-DihydroxyAnthrone 1143-72-2, 2,3,4-TriHydroxyBenzophenone
 1192-58-1 1197-55-3 1199-59-3 1204-86-0, 4-Morpholinobenzaldehyde
 1226-42-2, Anisil 1424-66-4 1450-75-5 1455-77-2,
 1H-1,2,4-Triazole-3,5-diamine 1466-88-2 1470-79-7,
 2,4,4'-TriHydroxyBenzophenone 1483-97-2 1484-05-5 1504-76-3
 1571-72-8 1643-19-2 1734-79-8 1820-80-0, 1H-Pyrazol-3-amine
 1874-22-2 1953-54-4, 1H-Indol-5-ol 1971-81-9 2058-74-4 2124-31-4

2291-40-9 2374-03-0 2380-84-9, 1H-Indol-7-ol 2380-86-1,
 1H-Indol-6-ol 2380-94-1, 1H-Indol-4-ol 2478-38-8 2510-01-2
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (hair dyes containing aromatic or heteroarom. aldehydes and ketones in
 combination with other dyes and color intensifiers)
 IT 2654-52-6 2785-06-0 2835-77-0, 2-AminoBenzophenone 2835-95-2
 2835-99-6 2871-01-4 2887-61-8, 2-Hydroxybutyrophenone 3011-34-5
 3131-52-0, 1H-Indole-5,6-diol 3158-63-2, 1,3-DimethylThiobarbituric acid
 3160-35-8 3160-37-0 3167-49-5 3215-37-0 3342-78-7 3433-54-3
 3565-42-2, Quinisinatin 3769-62-8, Gallion 3855-78-5 4181-05-9
 4318-76-7, 2,5-Pyridinediamine 4331-29-7, 1H-Benzimidazol-4-amine
 4335-90-4 4363-93-3, 4-Quinolinecarboxaldehyde 4506-66-5 4928-43-2
 4940-39-0 5007-67-0 5099-39-8 5131-58-8 5142-72-3 5142-73-4
 5192-03-0, 1H-Indol-5-amine 5192-04-1, 1H-Indol-7-amine 5192-23-4,
 1H-Indol-4-amine 5217-47-0, 1,3-DiethylThiobarbituric acid 5274-70-4
 5307-14-2 5318-27-4, 1H-Indol-6-amine 5345-47-1 5416-80-8
 5418-63-3 5432-53-1 5434-20-8 5551-11-1 5650-40-8,
 2-Hydroxypropioiophenone 5650-41-9, 3-Hydroxypropioiophenone 5679-13-0
 5682-83-7 5718-83-2 5850-35-1, Acid blue 29 5910-23-6 5930-28-9
 5959-52-4 6051-53-2 6201-65-6 6203-18-5 6222-46-4 6247-27-4,
 Mordant brown 4 6259-50-3 6322-56-1 6327-79-3 6358-09-4
 6361-22-4 6399-72-0 6628-04-2 6628-86-0 6633-46-1 6634-82-8
 6635-20-7 6781-42-6 6967-12-0, 1H-Indazol-6-amine 7313-70-4
 7336-20-1 7411-49-6 7426-56-4 7427-04-5 7570-45-8 7575-35-1
 7722-84-1, Hydrogen peroxide, biological studies 7749-47-5 7768-28-7
 7770-45-8 10040-98-9 10041-06-2 10111-08-7, 1H-Imidazole-2-
 carboxaldehyde 10173-66-7 10182-90-8D, salts of 10338-57-5,
 4-Piperidinobenzaldehyde 10342-85-5 10472-94-3 10472-95-4
 13441-40-2D, salts of 13505-39-0, 3-Hydroxybutyrophenone 13558-26-4
 13558-27-5 13558-57-1 13669-42-6, 3-Quinolinecarboxaldehyde
 13754-19-3, 4,5-Pyrimidinediamine 14189-80-1 14189-81-2 14268-66-7,
 1,3-Benzodioxol-5-amine 14338-36-4 14501-66-7 16082-33-0,
 1H-Pyrazole-3,5-diamine 16588-34-4 16634-88-1 16859-86-2
 16867-03-1 17028-61-4 17422-74-1 17630-76-1 17792-58-4
 18073-18-2 18899-16-6D, salts of 19005-93-7, 1H-Indole-2-
 carboxaldehyde 19012-02-3 19012-03-4 19335-11-6, 1H-Indazol-5-amine
 20103-09-7 20357-25-9 20427-81-0 21240-56-2 22411-59-2
 22715-34-0 22948-94-3 23244-87-3, 2,4,5-Pyridinetriamine 23894-07-7
 24119-24-2 24905-87-1, HC red 7 25128-32-9 27394-81-6 28020-38-4
 28491-52-3 29539-03-5 29705-39-3 31680-07-6 31835-64-0
 32387-21-6 33709-29-4 33985-71-6 36075-79-3D, salts of 39755-03-8,
 4-Hydroxybutyrophenone 39755-95-8 39910-98-0 41602-56-6,
 4-Dimethylamino-2-hydroxybenzaldehyde 41927-50-8 41946-53-6
 42426-35-7 42454-06-8 42758-54-3 42952-29-4 45791-64-8D, salts of
 46061-36-3D, salts of 46791-37-1D, salts of 46881-39-4D, salts of
 46893-92-9D, salts of 50610-28-1 50899-59-7 51387-92-9 51980-54-2,
 4-Pyrrolidinobenzaldehyde 53055-05-3 54628-24-9D, salts of
 55047-63-7 55198-95-3 55302-96-0 55949-38-7D, Pyrimidinol, derivs.
 56932-44-6, HC yellow 5 58028-76-5 58480-17-4 60159-98-0
61078-47-5 61078-48-6 61224-35-9 61693-42-3
 62077-85-4D, salts of 62378-72-7 62496-02-0 63053-27-0 63149-33-7
 64993-07-3 65443-86-9 66566-48-1 66635-40-3 67019-57-2
 67805-13-4 68391-32-2 69386-65-8 69537-53-7D, salts of 69825-83-8
 70484-29-6 70643-19-5 71134-97-9 73264-13-8D, salts of 74918-21-1
 74991-01-8D, salts of 75722-39-3D, salts of 77484-77-6 77523-60-5D,
 salts of 78521-11-6D, salts of 79352-72-0 81859-24-7, Polyquaternium
 10 82228-89-5 82576-75-8, HC violet 1 83073-86-3 83763-47-7
 84540-47-6 84540-50-1 84562-48-1 85679-78-3 85926-99-4
 87814-15-1 90134-10-4 90293-76-8D, derivs. 91921-13-0D, salts of

93841-24-8 93923-57-0 95195-42-9, 4,4'-Pyridil 95576-89-9, HC red 10
 96516-29-9 104333-09-7 110102-86-8 110952-48-2 114402-54-9
 114682-26-7 115423-86-4 117907-43-4 122438-74-8D, salts of
 128729-30-6 130133-55-0 130582-56-8 137290-86-9 144644-13-3
 147025-37-4D, salts of 149833-00-1D, salts of 155601-17-5
 159661-42-4 187030-52-0

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (hair dyes containing aromatic or heteroarom. aldehydes and ketones
 in combination with other dyes and color intensifiers)

IT 202525-71-1 202525-73-3 202525-74-4 202525-75-5 202525-76-6
 202525-78-8 215377-52-9 215517-65-0 215517-66-1 215517-68-3
 220118-56-9 223397-50-0D, salts of 223397-66-8D, salts of
 223397-83-9D, salts of 223397-92-0D, salts of 223398-02-5
 223398-35-4D, salts of 223398-44-5D, salts of 260980-91-4
 260980-95-8 260980-96-9 260980-97-0 260980-98-1 260980-99-2
 260981-00-8 278807-62-8D, salts of 278807-63-9D, salts of
 278807-64-0D, salts of 278807-65-1D, salts of 278807-66-2D, salts of
 278807-67-3D, salts of 278807-68-4D, salts of 278807-69-5D, salts of
 278807-70-8D, salts of 278807-71-9D, salts of 278807-72-0D, salts of
 278807-73-1D, salts of 278807-74-2D, salts of 278807-75-3D, salts of
 278807-76-4D, salts of 278807-77-5D, salts of 278807-78-6D, salts of
 278807-79-7D, salts of 278807-80-0D, salts of 279214-38-9
 279218-88-1D, salts of 279218-90-5D, salts of 279218-92-7D, salts of
 279218-94-9D, salts of 279218-98-3D, salts of 279219-00-0D, salts of
 279219-03-3D, salts of 279219-07-7D, salts of 279219-13-5D, salts of
 279219-17-9D, salts of 279219-21-5D, salts of 279219-24-8D, salts of
 279219-31-7D, salts of 324757-53-1D, salts of 324757-56-4D, salts of
 324757-57-5D, salts of 324757-59-7D, salts of 324757-60-0D, salts of
 324757-63-3 324757-64-4 325958-39-2D, salts of 325958-40-5D, salts
 of 325958-41-6D, salts of 325958-42-7D, salts of 325958-43-8D, salts
 of 325958-44-9D, salts of 346593-13-3 381211-42-3 381212-15-3
 503853-94-9 503854-25-9D, salts of 503854-51-1D, salts of
 503854-53-3D, salts of 503854-79-3D, salts of 503854-80-6D, salts of
 503854-82-8D, salts of 503854-83-9D, salts of 503854-84-0D, salts of
 503854-85-1D, salts of 503854-87-3D, salts of 503854-88-4D, salts of
 503854-89-5D, salts of 503854-90-8D, salts of 503854-91-9D, salts of
 503854-92-0D, salts of 503854-93-1D, salts of 503854-95-3D, salts of
 503854-98-6D, salts of 503855-00-3D, salts of 503855-01-4D, salts of
 503855-03-6D, salts of 503855-05-8D, salts of 503855-07-0D, salts of
 503855-09-2D, salts of 503855-11-6D, salts of 504433-02-7
 507244-55-5 507244-59-9 507244-64-6 507244-68-0 507244-82-8
 507244-90-8 507245-01-4 507245-40-1 507245-44-5 507245-49-0
 507245-54-7 507246-12-0

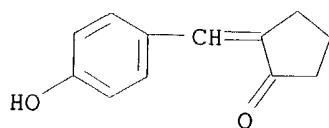
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (hair dyes containing aromatic or heteroarom. aldehydes and ketones in
 combination with other dyes and color intensifiers)

IT 61078-47-5 61078-48-6

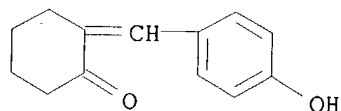
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (hair dyes containing aromatic or heteroarom. aldehydes and ketones
 in combination with other dyes and color intensifiers)

RN 61078-47-5 HCAPLUS

CN Cyclopentanone, 2-[(4-hydroxyphenyl)methylene]- (9CI) (CA INDEX NAME)



RN 61078-48-6 HCAPLUS
CN Cyclohexanone, 2-[(4-hydroxyphenyl)methylene]- (9CI) (CA INDEX NAME)

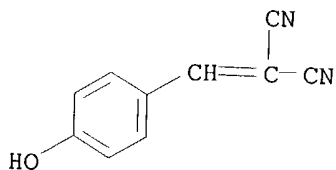


L76 ANSWER 10 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:608546 HCAPLUS
DN 133:198419
TI Reduction of hair growth by tyrosine kinase inhibitors
IN Henry, James P.; Ahluwalia, Gurpreet S.
PA The Gillette Company, USA
SO PCT Int. Appl., 17 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000050002	A1	20000831	WO 2000-US4198	20000218
	W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	US 6121269	A	20000919	US 1999-255063	19990222
	CA 2360524	AA	20000831	CA 2000-2360524	20000218
	BR 2000008239	A	20011106	BR 2000-8239	20000218
	EP 1156775	A1	20011128	EP 2000-914636	20000218
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			
PRAI	US 1999-255063	A1	19990222		
	WO 2000-US4198	W	20000218		
AB	Mammalian hair growth is reduced by applying to the skin an inhibitor of protein-tyrosine kinase. A method is described for applying to the skin a composition including an inhibitor of protein-tyrosine kinases in an amount effective to reduce hair growth. The unwanted hair growth which is reduced may be normal hair growth, or hair growth that results from an abnormal or diseased condition. The preferred composition includes at least one inhibitor of protein-tyrosine kinase in a cosmetically and/or dermatol. acceptable vehicle. The composition may be a solid, semi-solid, or liquid. The composition may be, for example, a cosmetic and dermatol. product in				

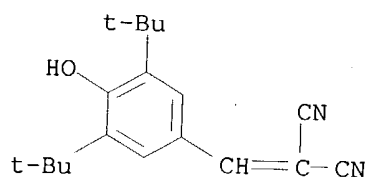
the form of an, for example, ointment, lotion, foam, cream, gel, or hydroalcoholic solution The composition may also be in the form of a shaving preparation or an aftershave. Human hair follicle growth assays showed that tyrphostin A48, erbstatin, lavendustin A, Me caffeate, and tyrphostin AG1478 showed the inhibition rate of 40-100 %.

- IC ICM A61K007-06
ICS A61K031-135; A61K031-215; A61K031-395; A61K031-425; A61K031-275
CC 62-4 (Essential Oils and Cosmetics)
ST tyrosine kinase inhibitor hair growth redn
IT Shaving preparations
(aftershave; hair growth inhibition by tyrosine kinase inhibitors)
IT Cosmetics
(depilatories; hair growth inhibition by tyrosine kinase inhibitors)
IT Cosmetics
Hirsutism
Shaving preparations
(hair growth inhibition by tyrosine kinase inhibitors)
IT Epidermal growth factor receptors
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(hair growth inhibition by tyrosine kinase inhibitors)
IT 80449-02-1, Tyrosine kinase
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(hair growth inhibition by tyrosine kinase inhibitors)
IT 127-35-5, Phenazocine 3785-90-8, 4-Hydroxybenzylidenemalononitri
le 3843-74-1, Methyl caffeate 10083-24-6, Piceatannol
10537-47-0 70563-58-5, Herbimycin A 100827-28-9, Erbstatin
118409-57-7 118409-58-8 118409-59-9
118409-60-2, Tyrphostin A 47 125697-92-9, Lavendustin A
126433-07-6, Tyrphostin A51 133550-32-0
134036-52-5 134036-53-6 139087-53-9 140674-76-6
144978-82-5 149092-34-2 149092-35-3
149092-50-2 153436-53-4, Tyrphostin AG 1478 168135-79-3
227030-50-4, Tyrphostin B 50
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(hair growth inhibition by tyrosine kinase inhibitors)
IT 3785-90-8, 4-Hydroxybenzylidenemalononitrile 10537-47-0
118409-57-7 118409-58-8 118409-59-9
118409-60-2, Tyrphostin A 47 126433-07-6, Tyrphostin A51
133550-32-0 134036-52-5 139087-53-9
144978-82-5 149092-34-2 149092-35-3
149092-50-2 227030-50-4, Tyrphostin B 50
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(hair growth inhibition by tyrosine kinase inhibitors)
RN 3785-90-8 HCAPLUS
CN Propanedinitrile, [(4-hydroxyphenyl)methylene]- (9CI) (CA INDEX NAME)



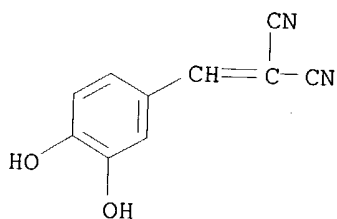
RN 10537-47-0 HCAPLUS

CN Propanedinitrile, [[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]methylene]-
(9CI) (CA INDEX NAME)



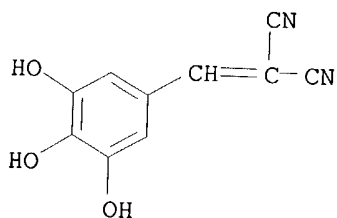
RN 118409-57-7 HCAPLUS

CN Propanedinitrile, [(3,4-dihydroxyphenyl)methylene]- (9CI) (CA INDEX NAME)



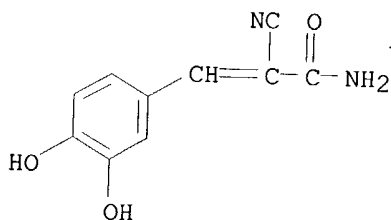
RN 118409-58-8 HCAPLUS

CN Propanedinitrile, [(3,4,5-trihydroxyphenyl)methylene]- (9CI) (CA INDEX NAME)



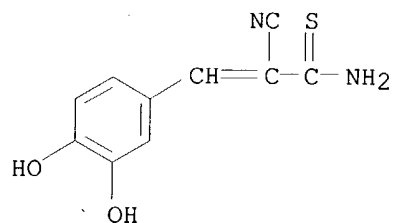
RN 118409-59-9 HCAPLUS

CN 2-Propenamide, 2-cyano-3-(3,4-dihydroxyphenyl)- (9CI) (CA INDEX NAME)

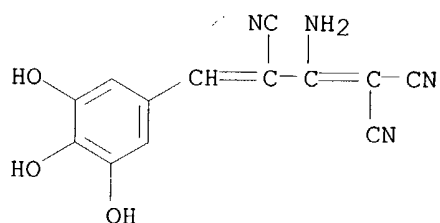


RN 118409-60-2 HCAPLUS

CN 2-Propenethioamide, 2-cyano-3-(3,4-dihydroxyphenyl)- (9CI) (CA INDEX NAME)

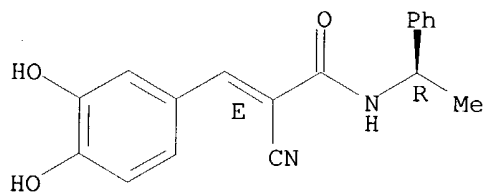


RN 126433-07-6 HCAPLUS
 CN 1,3-Butadiene-1,1,3-tricarbonitrile, 2-amino-4-(3,4,5-trihydroxyphenyl)-
 (9CI) (CA INDEX NAME)

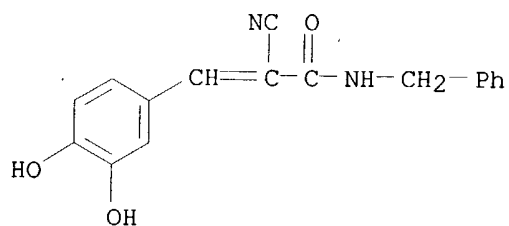


RN 133550-32-0 HCAPLUS
 CN 2-Propenamide, 2-cyano-3-(3,4-dihydroxyphenyl)-N-[(1R)-1-phenylethyl]-,
 (2E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.

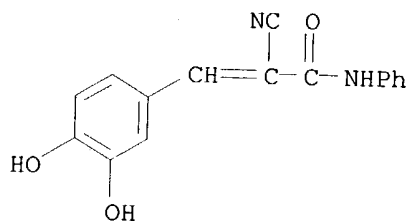


RN 134036-52-5 HCAPLUS
 CN 2-Propenamide, 2-cyano-3-(3,4-dihydroxyphenyl)-N-(phenylmethyl)- (9CI)
 (CA INDEX NAME)



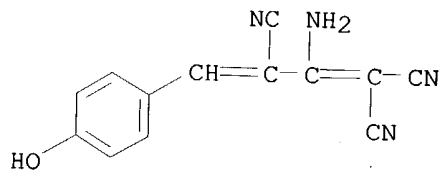
RN 139087-53-9 HCAPLUS

CN 2-Propenamide, 2-cyano-3-(3,4-dihydroxyphenyl)-N-phenyl- (9CI) (CA INDEX NAME)



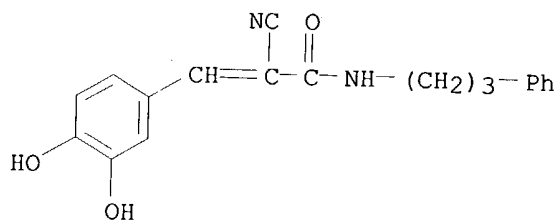
RN 144978-82-5 HCAPLUS

CN 1,3-Butadiene-1,1,3-tricarbonitrile, 2-amino-4-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)



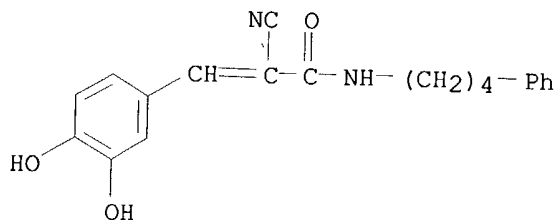
RN 149092-34-2 HCAPLUS

CN 2-Propenamide, 2-cyano-3-(3,4-dihydroxyphenyl)-N-(3-phenylpropyl)- (9CI) (CA INDEX NAME)



RN 149092-35-3 HCAPLUS

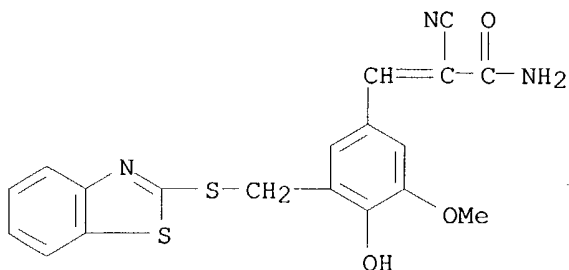
CN 2-Propenamide, 2-cyano-3-(3,4-dihydroxyphenyl)-N-(4-phenylbutyl)- (9CI) (CA INDEX NAME)



RN 149092-50-2 HCAPLUS

CN 2-Propenamide, 3-[3-[(2-benzothiazolylthio)methyl]-4-hydroxy-5-

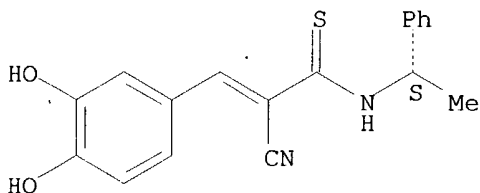
methoxyphenyl]-2-cyano- (9CI) (CA INDEX NAME)



RN 227030-50-4 HCAPLUS

CN 2-Propenethioamide, 2-cyano-3-(3,4-dihydroxyphenyl)-N-[(1S)-1-phenylethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.



RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L76 ANSWER 11 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1999:753548 HCAPLUS

DN 131:341754

TI Agent and method for temporary coloring of keratin fibers

IN Mettler, Sandra; Goettel, Otto; Pirrello, Aline

PA Wella A.-G., Germany

SO Ger. Offen., 24 pp.

CODEN: GWXXBX

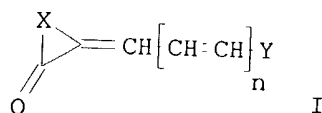
DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19822199	A1	19991118	DE 1998-19822199	19980516
	DE 19822199	C2	20030213		
	WO 9959528	A2	19991125	WO 1999-EP1236	19990226
	WO 9959528	A3	20001109		
	W: BR, JP, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	BR 9906441	A	20000711	BR 1999-6441	19990226
	EP 1041953	A1	20001011	EP 1999-911709	19990226
	EP 1041953	B1	20040707		
	R: AT, CH, DE, ES, FR, GB, IT, LI				
	JP 2002511890	T2	20020416	JP 1999-557358	19990226

AT 270538	E	20040715	AT 1999-911709	19990226
US 2002010969	A1	20020131	US 1999-445747	19991209
US 6494923	B2	20021217		
PRAI DE 1998-19822199	A	19980516		
WO 1999-EP1236	W	19990226		
OS MARPAT 131:341754				
GI				



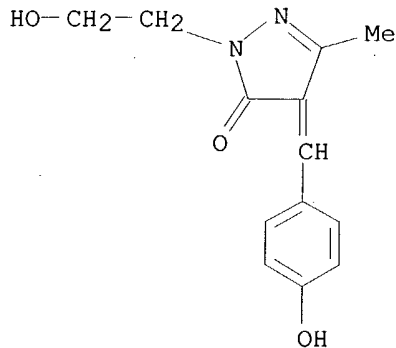
- AB Nonoxidative coloring agents for temporary coloring of keratin fibers such as hair and wool are provided which contain ≥ 1 polymethine dye I [X completes a 5- or 6-membered heterocyclic ring; Y = (substituted) carbocyclic or heterocyclic ring with no OH group α to the polymethine group, CHE1E2; E1, E2 = active CH₂-containing group; E1CE2 may form a nonarom. ring; n = 0-2]. Thus, 5-hydroxy-1-hydroxyethyl-3-methyl-1H-pyrazole reacted with 4-bis(2-hydroxyethyl)aminobenzaldehyde in refluxing EtOH to form 4-[4-bis(2-hydroxyethyl)aminobenzylidene]-2-(2-hydroxyethyl)-5-methyl-2,4-dihydropyrazol-3-one (II). Application of a dye solution containing II 0.8, EtOH 10.0, and 25% aqueous polyoxyethylene lauryl ether 10.0 g in 100.0 g H₂O to bleached hair at 40° for 20 min produced a brilliant orange color, which was almost completely decolorized by treatment with 10% Na₂SO₃.
- IC ICM A61K007-13
ICS D06P003-04; C09B023-02
- ICA D06P003-14
- CC 62-3 (Essential Oils and Cosmetics)
Section cross-reference(s): 41
- ST hair temporary polymethine dye
- IT Cyanine dyes
(agent and method for temporary coloring of keratin fibers)
- IT Oxidizing agents
Reducing agents
(decolorization with; agent and method for temporary coloring of keratin fibers)
- IT Sulfites
RL: BUU (Biological use, unclassified); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
(disulfites, reducing agents; agent and method for temporary coloring of keratin fibers)
- IT Group VIA element compounds
RL: BUU (Biological use, unclassified); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
(dithionites, reducing agents; agent and method for temporary coloring of keratin fibers)
- IT Hair preparations
(dyes; agent and method for temporary coloring of keratin fibers)
- IT Peroxysulfates
RL: BUU (Biological use, unclassified); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
(oxidizing agents; agent and method for temporary coloring of keratin fibers)

- IT Bisulfites
Sulfites
Thiols (organic), biological studies
RL: BUU (Biological use, unclassified); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
(reducing agents; agent and method for temporary coloring of keratin fibers)
- IT Organic compounds, biological studies
RL: BUU (Biological use, unclassified); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
(reductones; agent and method for temporary coloring of keratin fibers)
- IT 67-52-7D, Barbituric acid, (poly)unsatd. derivs. 137-45-1D, Pyrazol-3-one, (poly)unsatd. derivs. 141-84-4D, Rhodanine, (poly)unsatd. derivs. 461-72-3D, 2,4-Imidazolidinedione, (poly)unsatd. derivs. 504-17-6D, Thiobarbituric acid, (poly)unsatd. derivs. 2295-31-0D, 2,4-Thiazolidinedione, (poly)unsatd. derivs. 37342-64-6D, Pyridone, (poly)unsatd. derivs. 43228-53-1D, Isoxazolin-5-one, (poly)unsatd. derivs.
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(agent and method for temporary coloring of keratin fibers)
- IT 65036-66-0P 73834-28-3P 94266-09-8P 94266-11-2P 94266-12-3P
94266-14-5P 140214-13-7P 140214-17-1P 140214-18-2P 250211-50-8P
250211-51-9P 250211-52-0P **250211-53-1P** 250211-54-2P
250211-55-3P 250211-56-4P **250211-58-6P** **250211-59-7P**
250211-60-0P 250211-61-1P 250211-62-2P 250211-63-3P 250211-64-4P
250211-65-5P 250211-66-6P 250211-67-7P 250211-68-8P 250211-69-9P
250211-71-3P 250211-72-4P 250211-73-5P 250211-74-6P
RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(agent and method for temporary coloring of **keratin** fibers)
- IT 89-25-8, 3-Methyl-1-phenyl-2-pyrazolin-5-one 89-36-1 98-03-3, Thiophene-2-carboxaldehyde 100-10-7, 4-Dimethylaminobenzaldehyde 123-08-0, 4-Hydroxybenzaldehyde 487-89-8, Indole-3-carboxaldehyde 613-45-6, 2,4-Dimethoxybenzaldehyde 1008-72-6, Sodium benzaldehyde-2-sulfonate 6203-18-5, 4-Dimethylaminocinnamaldehyde 21951-33-7 27913-86-6, 4-Bis(2-hydroxyethyl)aminobenzaldehyde 42110-85-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(agent and method for temporary coloring of keratin fibers)
- IT 100-51-6, Benzyl alcohol, biological studies 621-59-0, Isovanillin 636-72-6, 2-Hydroxymethylthiophene
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(carrier; agent and method for temporary coloring of keratin fibers)
- IT 7722-84-1, Hydrogen peroxide, biological studies 7727-54-0, Ammonium persulfate
RL: BUU (Biological use, unclassified); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
(oxidizing agent; agent and method for temporary coloring of keratin fibers)
- IT 10192-30-0, Ammonium hydrogen sulfite 10196-04-0, Ammonium sulfite
RL: BUU (Biological use, unclassified); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
(reducing agent; agent and method for temporary coloring of keratin fibers)
- IT **250211-53-1P 250211-58-6P 250211-59-7P**
RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(agent and method for temporary coloring of **keratin** fibers)

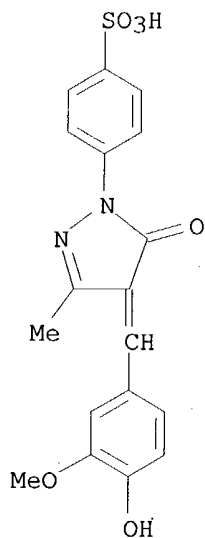
RN 250211-53-1 HCAPLUS

CN 3H-Pyrazol-3-one, 2,4-dihydro-2-(2-hydroxyethyl)-4-[(4-hydroxyphenyl)methylene]-5-methyl- (9CI) (CA INDEX NAME)



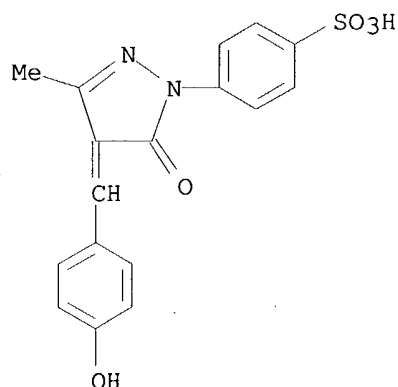
RN 250211-58-6 HCAPLUS

CN Benzenesulfonic acid, 4-[4,5-dihydro-4-[(4-hydroxy-3-methoxyphenyl)methylene]-3-methyl-5-oxo-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)



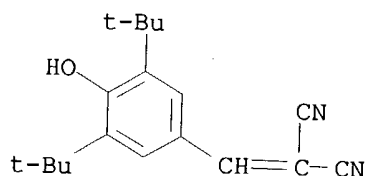
RN 250211-59-7 HCAPLUS

CN Benzenesulfonic acid, 4-[4,5-dihydro-4-[(4-hydroxyphenyl)methylene]-3-methyl-5-oxo-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)



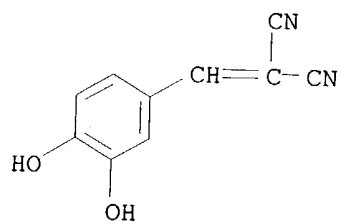
L76 ANSWER 12 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 1999:547970 HCAPLUS
 DN 131:295318
 TI Tyrphostins that suppress the growth of human papilloma virus
 16-immortalized human keratinocytes
 AU Ben-Bassat, H.; Rosenbaum-Mitrani, S.; Hartzstark, Z.; Levitzki, R.;
 Chaouat, M.; Shlomai, Z.; Klein, B. Y.; Kleinberger-Doron, N.; Gazit, A.;
 Tsvieli, R.; Levitzki, A.
 CS Laboratory of Experimental Surgery, Jerusalem, Israel
 SO Journal of Pharmacology and Experimental Therapeutics (1999), 290(3),
 1442-1457
 CODEN: JPETAB; ISSN: 0022-3565
 PB American Society for Pharmacology and Experimental Therapeutics
 DT Journal
 LA English
 AB Human papilloma virus 16 (HPV16) is considered to be the causative agent
 for cervical cancer, which ranks second to breast cancer in women's
 malignancies. In an attempt to develop drugs that inhibit the malignant
 transformation of HPV16-immortalized epithelial cells, we examined the
 effect of tyrphostins on such cells. We examined the effect of tyrphostins
 from four different families on the growth of HPV16-immortalized human
 keratinocytes (HF-1) cells. We found that they alter their cell cycle
 distribution, their morphol., and induce cell death by apoptosis. The
 effects of tyrphostins on HF-1 cells are different from their effects on
 normal keratinocytes. Growth suppression by AG555 and AG1478 is
 accompanied by 30% apoptosis in HF-1 cells, but this is not observed in
 normal keratinocytes. Tyrphostin treatment produces distinctive morphol.
 changes in HF-1 cells and in normal keratinocytes; however, the culture
 organization of normal keratinocytes is less disrupted. These
 differential effects of the tyrphostins on HPV16-immortalized
 keratinocytes compared with their effects on normal keratinocytes suggests
 that these compds. are suitable candidates for the treatment of papilloma.
 Previous and present results indicate that group 1 tyrphostins, which
 inhibit Cdk2 activation, and group 2 tyrphostins, represented by AG1478, a
 potent epidermal growth factor receptor kinase inhibitor, induce cell
 cycle arrest; and, in the case of HF-1 cells, apoptosis and
 differentiation. Cells accumulate in the G1 phase of the cell cycle at
 the expense of S and G2 + M. These compds. block the growth of normal
 keratinocytes without inducing apoptosis or differentiation, causing them
 to accumulate in G1. AG17, which belongs to group 4, exerts its
 antiproliferative effect mainly by increasing the fractions of cells in G1

- with a concomitant decrease in the fraction of cells in S and G2 + M.
- CC 1-8 (Pharmacology)
- ST tyrphostin human papilloma virus 16 keratinocyte; apoptosis HPV16
tyrphostin cervical cancer
- IT Phosphorylation, biological
(autophosphorylation, of EGF receptors; tyrphostins suppress growth of
human papilloma virus 16-immortalized human keratinocytes)
- IT Epidermal growth factor receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(autophosphorylation; tyrphostins suppress growth of human papilloma
virus 16-immortalized human keratinocytes)
- IT Uterus, neoplasm
Uterus, neoplasm
(cervix, inhibitors; tyrphostins suppress growth of human papilloma
virus 16-immortalized human keratinocytes)
- IT Antitumor agents
(cervix; tyrphostins suppress growth of human papilloma virus
16-immortalized human keratinocytes)
- IT Skin
(keratinocyte; tyrphostins suppress growth of human papilloma virus
16-immortalized human keratinocytes)
- IT Apoptosis
Cell cycle
Cell differentiation
Human papillomavirus 16
(tyrphostins suppress growth of human papilloma virus 16-immortalized
human keratinocytes)
- IT Cytotoxic agents
(tyrphostins; tyrphostins suppress growth of human papilloma virus
16-immortalized human keratinocytes)
- IT 10537-47-0, AG 17 118409-57-7, AG 18 133550-34-2
, AG 555 133550-35-3, AG 494 148741-31-5, AG 974
151391-93-4, AG 814 153436-53-4, AG 1478 170448-92-7, AG 1387
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
(Uses)
(tyrphostins suppress growth of human papilloma virus 16-immortalized
human **keratinocytes**)
- IT 10537-47-0, AG 17 118409-57-7, AG 18 133550-34-2
, AG 555 133550-35-3, AG 494 148741-31-5, AG 974
170448-92-7, AG 1387
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
(Uses)
(tyrphostins suppress growth of human papilloma virus 16-immortalized
human **keratinocytes**)
- RN 10537-47-0 HCAPLUS
- CN Propanedinitrile, [[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]methylene]-
(9CI) (CA INDEX NAME)



RN 118409-57-7 HCAPLUS

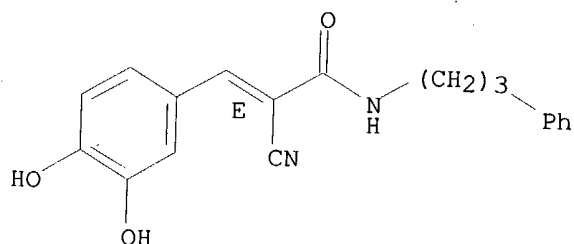
CN Propanedinitrile, [(3,4-dihydroxyphenyl)methylene]- (9CI) (CA INDEX NAME)



RN 133550-34-2 HCAPLUS

CN 2-Propenamide, 2-cyano-3-(3,4-dihydroxyphenyl)-N-(3-phenylpropyl)-, (2E)- (9CI) (CA INDEX NAME)

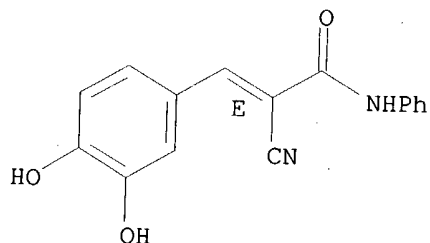
Double bond geometry as shown.



RN 133550-35-3 HCAPLUS

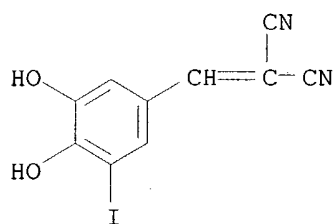
CN 2-Propenamide, 2-cyano-3-(3,4-dihydroxyphenyl)-N-phenyl-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



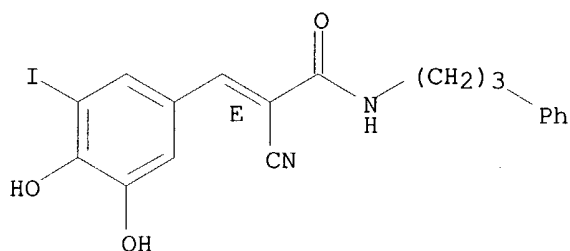
RN 148741-31-5 HCAPLUS

CN Propanedinitrile, [(3,4-dihydroxy-5-iodophenyl)methylene]- (9CI) (CA INDEX NAME)



RN 170448-92-7 HCAPLUS
 CN 2-Propenamide, 2-cyano-3-(3,4-dihydroxy-5-iodophenyl)-N-(3-phenylpropyl)-,
 (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RE.CNT 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L76 ANSWER 13 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1998:716115 HCAPLUS

DN 129:347135

TI Use of benzylidene ketones for dyeing keratin fibers

IN Moeller, Hinrich; Hoeffkes, Horst; Meinigke, Bernd

PA Henkel Kommanditgesellschaft Auf Aktien, Germany

SO Eur. Pat. Appl., 15 pp.

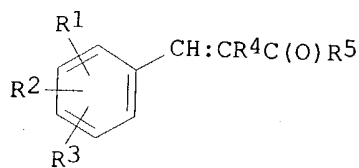
CODEN: EPXXDW

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 873743	A2	19981028	EP 1998-106831	19980415
	EP 873743	A3	19991215		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	DE 19717281	A1	19981029	DE 1997-19717281	19970424
PRAI	DE 1997-19717281		19970424		
OS	MARPAT 129:347135				
GI					



I

- AB Benzylidene ketones [I; R1-R3 = H, halo, alkyl, hydroxyalkyl, aminoalkyl, alkoxy, (hydroxy)alkylamino, N-heterocyclyl, NO2, CO2H, SO3H; R4 = H, C1-4 alkyl, C1-4 acyl; R5 = C1-4 alkyl; or R4R5 = (substituted) C1-5 alkylene] are components of nonoxidative or oxidative hair dyes which provide an intensity and fastness of color comparable to oxidative dyes and cause little or no skin sensitization. I alone impart hair colors mainly in the yellow spectral region; I may be applied together with primary or secondary amines, N-heterocyclic compds., aromatic OH compds., or compds. with active CH groups to produce orange, brown, violet, green, and black coloration. Thus, a suspension of 3,4-methylenedioxybenzylideneacetone 10, 2,5-diaminotoluene sulfate 10, NaOAc 10 mmol, and 1 drop 20% fatty alkyl ether sulfate were suspended in 100 mL H2O, the suspension was heated briefly to 80°, cooled, and filtered, and the pH was adjusted to 6. Gray hair exposed to this solution for 30 min at 30° took on a violet color.
- IC ICM A61K007-13
- CC 62-3 (Essential Oils and Cosmetics)
- ST benzylidene ketone hair dye
- IT Amines, biological studies
- RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
- (aromatic; use of benzylidene ketones for dyeing keratin fibers)
- IT Amines, biological studies
- Amines, biological studies
- RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
- (aryl, secondary; use of benzylidene ketones for dyeing keratin fibers)
- IT Hair preparations
- (dyes, oxidative; use of benzylidene ketones for dyeing keratin fibers)
- IT Hair preparations
- (dyes; use of benzylidene ketones for dyeing keratin fibers)
- IT Heterocyclic compounds
- RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
- (nitrogen; use of benzylidene ketones for dyeing keratin fibers)
- IT Alcohols, biological studies
- Amines, biological studies
- RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
- (primary; use of benzylidene ketones for dyeing keratin fibers)
- IT Alcohols, biological studies
- Amines, biological studies
- RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
- (secondary; use of benzylidene ketones for dyeing keratin fibers)
- IT Amino acids, biological studies
- Peptides, biological studies
- Phenols, biological studies
- RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

(Uses)

(use of benzylidene ketones for dyeing keratin fibers)

IT 59-48-3, Oxindole 65-49-6, 4-Aminosalicylic acid 67-52-7, Barbituric acid 83-30-7 83-56-7, 1,5-Dihydroxynaphthalene 87-02-5, 7-Amino-4-hydroxynaphthalene-2-sulfonic acid 87-66-1, Pyrogallol 88-21-1, 2-Aminobenzenesulfonic acid 89-57-6, 5-Aminosalicylic acid 89-86-1, 2,4-Dihydroxybenzoic acid 90-05-1, 2-Methoxyphenol 90-15-3, 1-Naphthol 90-20-0, 4-Amino-5-hydroxynaphthalene-2,7-disulfonic acid 92-44-4, 2,3-Dihydroxynaphthalene 92-65-9 95-54-5, o-Phenylenediamine, biological studies 95-55-6, 2-Aminophenol 95-70-5, 2,5-Diaminotoluene 95-88-5, 4-Chlororesorcinol 98-37-3, 3-Amino-4-hydroxybenzenesulfonic acid 99-05-8, 3-Aminobenzoic acid 99-07-0, 3-Dimethylaminophenol 99-31-0, 5-Aminoisophthalic acid 99-50-3, 3,4-Dihydroxybenzoic acid 101-77-9, 4,4'-Diaminodiphenylmethane 101-80-4 102-32-9, 3,4-Dihydroxyphenylacetic acid 106-50-3, 1,4-Benzenediamine, biological studies 108-45-2, 1,3-Benzenediamine, biological studies 108-46-3, 1,3-Benzenediol, biological studies 108-72-5, 1,3,5-Triaminobenzene 108-73-6, Phloroglucinol 118-70-7, 4,5,6-Triaminopyrimidine 118-92-3, 2-Aminobenzoic acid 119-59-5, 4,4'-Diaminodiphenyl sulfoxide 119-70-0, 4,4'-Diaminodiphenylamine-2-sulfonic acid 120-80-9, Pyrocatechol, biological studies 121-47-1, 3-Aminobenzenesulfonic acid 121-57-3, 4-Aminobenzenesulfonic acid 122-57-6, Benzylideneacetone 123-30-8 123-31-9, 1,4-Benzenediol, biological studies 139-65-1, 4,4'-Diaminodiphenyl sulfide 141-84-4, Rhodanine 141-86-6, 2,6-Diaminopyridine 149-91-7, Gallic acid, biological studies 150-13-0 150-19-6, 3-Methoxyphenol 150-75-4, 4-Methylaminophenol 150-76-5, 4-Methoxyphenol 156-81-0, 2,4-Diaminopyrimidine 452-58-4, 2,3-Diaminopyridine 462-08-8, 3-Aminopyridine 480-66-0 488-87-9, 2,5-Dimethylresorcinol 496-73-1, 4-Methylresorcinol 504-15-4, 5-Methylresorcinol 504-17-6, Thiobarbituric acid 504-24-5, 4-Aminopyridine 504-29-0, 2-Aminopyridine 517-22-6, 2,4-Dimethyl-3-ethylpyrrole 533-31-3, 3,4-Methylenedioxyphenol 533-73-3, Hydroxyhydroquinone 535-87-5, 3,5-Diaminobenzoic acid 537-65-5, 4,4'-Diaminodiphenylamine 578-66-5, 8-Aminoquinoline 580-17-6, 3-Aminoquinoline 580-22-3, 2-Aminoquinoline 582-17-2, 2,7-Dihydroxynaphthalene 591-27-5, 3-Aminophenol 603-81-6, 2,3-Diaminobenzoic acid 606-55-3 608-25-3, 2-Methylresorcinol 610-74-2, 2,5-Diaminobenzoic acid 611-03-0, 2,4-Diaminobenzoic acid 611-98-3, 4,4'-Diaminobenzophenone 615-50-9 615-66-7, 2-Chloro-p-phenylenediamine 615-71-4, 1,2,4-Triaminobenzene 619-05-6, 3,4-Diaminobenzoic acid 623-09-6 636-25-9, 2,5-Diaminophenol 876-87-9 934-22-5, 5-Aminobenzimidazole 943-88-4, 4-Methoxybenzylideneacetone 1004-74-6, 2,4,5,6-Tetraaminopyrimidine 1004-75-7, 4-Hydroxy-2,5,6-triaminopyrimidine 1080-12-2, 4-Hydroxy-3-methoxybenzylideneacetone 1123-55-3, 7-Aminobenzothiazole 1125-60-6, 5-Aminoisoquinoline 1197-55-3, 4-Aminophenylacetic acid 1455-77-2, 3,5-Diamino-1,2,4-triazole 1571-72-8, 3-Amino-4-hydroxybenzoic acid 1820-80-0, 3-Aminopyrazole 1953-54-4, 5-Hydroxyindole 2374-03-0, 4-Amino-3-hydroxybenzoic acid 2380-84-9, 7-Hydroxyindole 2380-86-1, 6-Hydroxyindole 2380-94-1, 4-Hydroxyindole 2654-52-6, 2,3-Dimethylbenzothiazolium p-toluenesulfonate 2785-06-0, 2,3-Dimethylbenzothiazolium iodide 2835-95-2, 2-Methyl-5-aminophenol 2835-99-6, 3-Methyl-4-aminophenol 3131-52-0, 5,6-Dihydroxyindole 3158-63-2, 1,3-Dimethylthiobarbituric acid 3160-35-8 3160-37-0 3167-49-5, 6-Aminonicotinic acid 3855-78-5, 2,3,4-Trimethylpyrrole 4318-76-7, 2,5-Diaminopyridine 4331-29-7, 4-Aminobenzimidazole 4335-90-4, 3-Benzylidene-2,4-pentanedione 4506-66-5, 1,2,4,5-Tetraaminobenzene tetrahydrochloride 4928-43-2 5007-67-0, 3,3',4,4'-Tetraaminobenzophenone 5192-03-0, 5-Aminoindole 5192-04-1,

7-Aminoindole 5192-23-4, 4-Aminoindole 5217-47-0, 1,3-Diethylthiobarbituric acid 5318-27-4, 6-Aminoindole 5345-47-1, 2-Aminonicotinic acid 5432-53-1 5434-20-8, 3-Aminophthalic acid 5679-13-0, 2-Benzylidenecyclopentanone 5682-83-7, 2-Benzylidenecyclohexanone 5718-83-2, Rhodanine-3-acetic acid 5959-52-4, 3-Amino-2-naphthoic acid 6051-53-2, 2-Hydroxybenzylideneacetone 6201-65-6, 2-Chlororesorcinol 6259-50-3 6399-72-0 6628-04-2, 4-Aminoquinaldine 6967-12-0, 6-Aminoindazole 7169-34-8, Coumaranone 7336-20-1, Disodium 4,4'-diaminostilbene-2,2'-disulfonate 7411-49-6 7575-35-1, N,N-Bis(2-hydroxyethyl)-p-phenylenediamine 7749-47-5, 2-Amino-4-methoxy-6-methylpyrimidine 7768-28-7, 2-(2-Hydroxyethyl)phenol 13754-19-3, 4,5-Diaminopyrimidine 14268-66-7, 3,4-Methylenedioxyaniline 16082-33-0, 3,5-Diaminopyrazole 16867-03-1, 2-Amino-3-hydroxypyridine 17792-58-4 19335-11-6, 5-Aminoindazole 20103-09-7, 2,5-Dichloro-p-phenylenediamine 22715-34-0, 2-Hydroxy-4,5,6-triaminopyrimidine 23244-87-3, 2,4,5-Pyridinetriamine 23894-07-7, 3,6-Dihydroxy-2,7-naphthalenedisulfonic acid 24119-24-2 28020-38-4, 2,3-Diamino-6-methoxypyridine 29539-03-5, 5,6-Dihydroxyindoline 41927-50-8 41946-53-6 42426-35-7 49647-58-7, 2,4,5,6-Tetraaminopyrimidine sulfate 53666-79-8 53760-27-3, 4,4'-Diaminodiphenylamine sulfate 55302-96-0, 2-Methyl-5-(2-hydroxyethylamino)phenol 56216-28-5 58262-44-5 **61078-47-5** **61078-48-6** 61693-42-3 62496-02-0, 2-Methylamino-4,5,6-triaminopyrimidine 63053-27-0, 3-(4-Dimethylaminobenzylidene)-2,4-pentanedione 65443-86-9 66566-48-1 66635-40-3 67805-13-4 69984-77-6, 7-Aminobenzimidazole 70643-19-5, 2,4-Diaminophenoxyethanol 74918-21-1 79352-72-0 83732-72-3 84540-47-6, 2,6-Dihydroxy-3,4-dimethylpyridine 84540-50-1 85679-78-3, 3,5-Diamino-2,6-dimethoxypyridine 85926-99-4, 4-Hydroxyindoline 90817-34-8, 3-Amino-2-methylamino-6-methoxypyridine 93841-24-8, 2-(2,5-Diaminophenyl)ethanol 93841-25-9 104333-09-7 110102-86-8 114402-54-9 115423-86-4 128729-30-6 130582-56-8 131212-31-2 137290-86-9 144644-13-3 159661-42-4 202525-71-1 202525-73-3 202525-74-4 202525-75-5 202525-76-6 202525-77-7 202525-78-8 202525-79-9 215377-52-9 215377-53-0 215377-55-2 215377-56-3 215517-65-0 215517-66-1 215517-68-3

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(use of benzylidene ketones for dyeing **keratin** fibers)

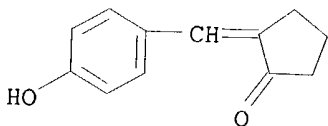
IT **61078-47-5** **61078-48-6**

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(use of benzylidene ketones for dyeing **keratin** fibers)

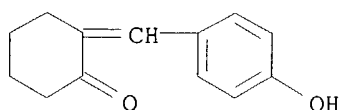
RN 61078-47-5 HCAPLUS

CN Cyclopentanone, 2-[(4-hydroxyphenyl)methylene]- (9CI) (CA INDEX NAME)



RN 61078-48-6 HCAPLUS

CN Cyclohexanone, 2-[(4-hydroxyphenyl)methylene]- (9CI) (CA INDEX NAME)



L76 ANSWER 14 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1998:537999 HCAPLUS

DN 129:140457

TI Hair compositions containing a ceramide and a sulfonic UV filter

IN Dubief, Claude; Cauwet, Martin Daniele

PA L'Oreal S. A., Fr.

SO Fr. Demande, 25 pp.

CODEN: FRXXBL

DT Patent

LA French

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2757382	A1	19980626	FR 1996-15762	19961220
	FR 2757382	B1	19990205		
	EP 852134	A1	19980708	EP 1997-402952	19971205
	EP 852134	B1	20011205		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	AT 209889	E	20011215	AT 1997-402952	19971205
	PT 852134	T	20020531	PT 1997-402952	19971205
	ES 2169339	T3	20020701	ES 1997-402952	19971205
	AU 9746914	A1	19980625	AU 1997-46914	19971208
	AU 703469	B2	19990325		
	BR 9706297	A	19990504	BR 1997-6297	19971218
	US 6190676	B1	20010220	US 1997-993313	19971218
	CA 2222861	AA	19980620	CA 1997-2222861	19971219
	CA 2222861	C	20021203		
	JP 10182364	A2	19980707	JP 1997-351450	19971219
	JP 3192998	B2	20010730		
	CN 1196924	A	19981028	CN 1997-129724	19971219
	CN 1104879	B	20030409		
	RU 2141307	C1	19991120	RU 1997-121236	19971219
PRAI	FR 1996-15762	A	19961220		

OS MARPAT 129:140457

AB Hair comps. containing a ceramide and a sulfonic UV filter are disclosed. A shampoo contained 2-hydroxy-4-methoxybenzophenone-5-sulfonic acid 0.5, 2-N-oleoylamino-octadecane-1,3-diol 0.5, ethoxylated sodium lauryl ether sulfate 13.8, 30% cocoyl-betaine 2.5, and water q.s. 100 g, pH = 5.

IC ICM A61K007-06

CC 62-3 (Essential Oils and Cosmetics)

ST hair compn ceramide sulfonic UV filter; sunscreen shampoo benzophenone sulfonic acid oleoylamino-octadecane

IT Hair preparations

Shampoos

Sunscreens

(hair comps. containing ceramide and sulfonic UV filter)

IT Ceramides

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(hair comps. containing ceramide and sulfonic UV filter)

IT Hair preparations

(lotions; hair compns. containing ceramide and sulfonic UV filter)

IT 2304-80-5 4065-45-6 5966-29-0 27503-81-7 34227-66-2 34227-83-3
 54472-82-1 54472-84-3 54472-92-3 54472-93-4 56039-58-8
 92761-26-7 98758-62-4 110483-07-3 110861-93-3 147492-65-7
 149591-38-8 160065-31-6 169329-85-5 169329-86-6 **169329-87-7**
 169329-88-8 169529-07-1 170864-84-3 182251-17-8 184426-48-0
 184426-49-1 184426-50-4 190249-36-6 190274-06-7 190381-46-5

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(hair compns. containing ceramide and sulfonic UV filter)

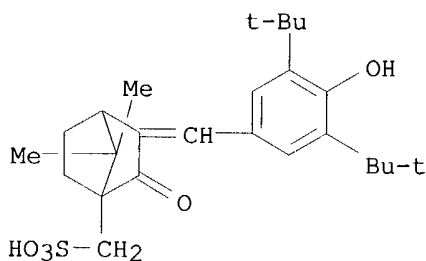
IT **169329-87-7**

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(hair compns. containing ceramide and sulfonic UV filter)

RN 169329-87-7 HCAPLUS

CN Bicyclo[2.2.1]heptane-1-methanesulfonic acid, 3-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]methylene]-7,7-dimethyl-2-oxo- (9CI) (CA INDEX NAME)



L76 ANSWER 15 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1997:461636 HCAPLUS

DN 127:85813

TI Reduction of hair growth with suppressor of the metabolic pathway for the conversion of glucose to acetyl-CoA

IN Henry, James; Ahluwalia, Gurpreet; Shander, Douglas

PA Handelman, Joseph, H., USA; Henry, James; Ahluwalia, Gurpreet; Shander, Douglas

SO PCT Int. Appl., 16 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9719673	A2	19970605	WO 1996-US19102	19961125
	WO 9719673	A3	19971002		
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW:	KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	US 5652273	A	19970729	US 1995-565728	19951130

ZA 9609781	A	19970610	ZA 1996-9781	19961121
CA 2237780	AA	19970605	CA 1996-2237780	19961125
CA 2237780	C	20020129		
AU 9710865	A1	19970619	AU 1997-10865	19961125
AU 728886	B2	20010118		
EP 863741	A2	19980916	EP 1996-940921	19961125
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
BR 9611756	A	19990406	BR 1996-11756	19961125
JP 2000501098	T2	20000202	JP 1997-520706	19961125
EP 1352627	A2	20031015	EP 2003-10707	19961125
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
US 5824665	A	19981020	US 1997-842054	19970423
US 6218435	B1	20010417	US 1998-118946	19980717
PRAI US 1995-565728	A1	19951130		
EP 1996-940921	A3	19961125		
WO 1996-US19102	W	19961125		
US 1997-842054	A3	19970423		
AB	A method of reducing hair growth in a mammal includes applying, to an area of skin from which reduced hair growth is desired, dermatol. acceptable composition containing a suppressor of the metabolic pathway for the conversion of glucose to acetyl-CoA. A 10% solution of N- α -(p-tosyl)-L-lysine chloromethyl ketone in a vehicle comprising water 68, ethanol 16, propylene glycol 5, dipropylene glycol 5, benzyl alc. 4, and propylene carbonate 2% inhibited hair growth in hamster by 81%.			
IC	ICM A61K007-06			
CC	62-3 (Essential Oils and Cosmetics)			
ST	hair growth inhibitor glucose acetylcoenzyme suppressor			
IT	Carbohydrates, biological studies			
	RL: BSU (Biological study, unclassified); BIOL (Biological study) (aldoses, inhibitors; reduction of hair growth with suppressor of metabolic pathway for conversion of glucose to acetyl-CoA)			
IT	Hair preparations (growth inhibitors; reduction of hair growth with suppressor of metabolic pathway for conversion of glucose to acetyl-CoA)			
IT	Hirsutism			
	Metabolic pathways (reduction of hair growth with suppressor of metabolic pathway for conversion of glucose to acetyl-CoA)			
IT	Lactones			
	RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (α -methylene; reduction of hair growth with suppressor of metabolic pathway for conversion of glucose to acetyl-CoA)			
IT	9001-51-8, Hexokinase 9001-59-6, Pyruvate kinase 9001-80-3, Phosphofructokinase 9001-83-6, Phosphoglycerate kinase 9014-08-8, Enolase 9014-20-4, Pyruvate dehydrogenase			
	RL: BSU (Biological study, unclassified); BIOL (Biological study) (inhibitors; reduction of hair growth with suppressor of metabolic pathway for conversion of glucose to acetyl-CoA)			
IT	50-99-7, Glucose, biological studies			
	RL: BSU (Biological study, unclassified); BIOL (Biological study) (reduction of hair growth with suppressor of metabolic pathway for conversion of glucose to acetyl-CoA)			
IT	72-89-9, Acetyl-CoA			
	RL: BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative) (reduction of hair growth with suppressor of metabolic pathway for conversion of glucose to acetyl-CoA)			

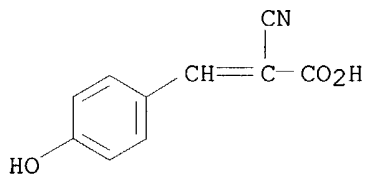
IT 59-00-7 60-82-2, Phloretin 93-10-7, Quinaldic acid 138-81-8
 154-17-6, 2-Deoxyglucose 298-12-4 433-48-7, Fluoropyruvic acid
 492-27-3 502-87-4 576-47-6, 6-Amino-6-deoxy-glucose 666-99-9, Agaric
 acid 820-11-1 1113-59-3, Bromopyruvic acid 1684-29-3,
 5-keto-D-Fructose 2364-87-6 2490-91-7, 3-Deoxyglucose 3443-58-1,
 D(-)-3-Phosphoglyceric acid 3615-17-6, N-Acetyl-β-D-mannosamine
 14049-03-7 14307-02-9, D-Mannosamine 14886-81-8 17994-25-1,
 Hydroxy-1-cyclopropanecarboxylic acid 18542-37-5, Vernolepin
 19039-02-2, Taxodone 20408-97-3, 5-Thio-D-glucose **28166-41-8**,
 α-Cyano-4-hydroxycinnamic acid 29702-43-0, 2-Deoxy-2-fluoro-D-
 glucose 33854-15-8, Eupacunin 39217-32-8, 5-keto-D-Fructose-1,6-
 bisphosphate 41627-63-8 41627-64-9 57454-44-1, 5'-p-
 Fluorosulfonylbenzoyl adenosine 74804-09-4 99128-97-9 173266-82-5
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (reduction of **hair** growth with suppressor of metabolic pathway
 for conversion of glucose to acetyl-CoA)

IT 50-99-7, D-Glucose, biological studies
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
 (Biological study); PROC (Process)
 (transport; inhibitors; reduction of hair growth with suppressor of
 metabolic pathway for conversion of glucose to acetyl-CoA)

IT **28166-41-8**, α-Cyano-4-hydroxycinnamic acid
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (reduction of **hair** growth with suppressor of metabolic pathway
 for conversion of glucose to acetyl-CoA)

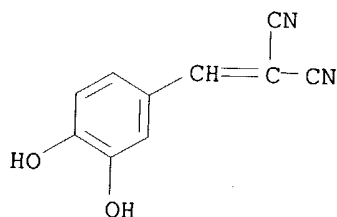
RN 28166-41-8 HCAPLUS

CN 2-Propenoic acid, 2-cyano-3-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)



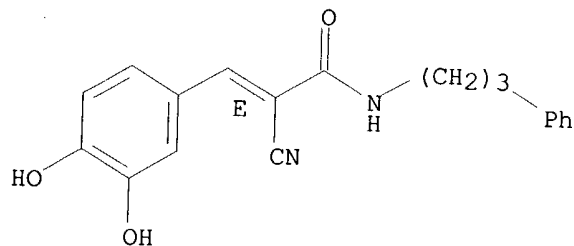
L76 ANSWER 16 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 1995:558179 HCAPLUS
 DN 123:25264
 TI Tyrphostins suppress the growth of psoriatic keratinocytes
 AU Ben-Bassat, Hannah; Vardi, Daniel V.; Gazit, Aviv; Klaus, Sidney N.;
 Chaouat, Malka; Hartzstark, Zipora; Levitzki, Alexander
 CS Laboratory of Experimental Surgery, Hadassah University Hospital,
 Jerusalem, Israel
 SO Experimental Dermatology (1995), 4(2), 82-8
 CODEN: EXDEEY; ISSN: 0906-6705
 DT Journal
 LA English
 AB Tyrosine kinase inhibitors of the tyrphostin family which block EGF
 receptor kinase are reported to arrest the growth of psoriatic
 keratinocytes in vitro. Three tyrphostins with the potency ratio AG555 >>
 AG18 >> AG814 were found to arrest growth with no adverse cytotoxic
 effects. The potency ratio to inhibit keratinocyte proliferation follows
 their potency to inhibit EGF receptor kinase activity in vitro. These
 compds. represent novel leads for the therapy of psoriasis.

CC 1-6 (Pharmacology)
 ST keratinocyte psoriasis inhibition tyrphostin
 IT Cell cycle
 Cell proliferation
 Psoriasis
 (tyrphostin suppression of growth of psoriatic keratinocyte)
 IT Animal growth regulators
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (tyrphostin suppression of growth of psoriatic keratinocyte)
 IT Skin
 (keratinocyte, tyrphostin suppression of growth of psoriatic keratinocyte)
 IT Cytotoxic agents
 (tyrphostins, tyrphostin suppression of growth of psoriatic keratinocyte)
 IT **118409-57-7, AG 18 133550-34-2 151391-93-4**
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (tyrphostin suppression of growth of psoriatic **keratinocyte**)
 IT **118409-57-7, AG 18 133550-34-2**
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (tyrphostin suppression of growth of psoriatic **keratinocyte**)
 RN 118409-57-7 HCAPLUS
 CN Propanedinitrile, [(3,4-dihydroxyphenyl)methylene]- (9CI) (CA INDEX NAME)



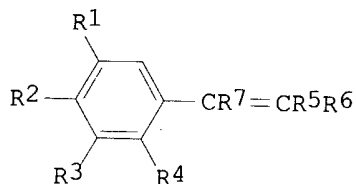
RN 133550-34-2 HCAPLUS
 CN 2-Propenamide, 2-cyano-3-(3,4-dihydroxyphenyl)-N-(3-phenylpropyl)-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L76 ANSWER 17 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 1991:478609 HCAPLUS
 DN 115:78609
 TI Hair growth-stimulating compositions containing aryl-substituted ethylene
 IN Green, Martin Richard
 PA Unilever PLC, UK; Unilever N. V.
 SO Eur. Pat. Appl., 33 pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 403238	A2	19901219	EP 1990-306415	19900613
	EP 403238	A3	19920304		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE				
	CA 2018737	AA	19901214	CA 1990-2018737	19900611
	US 5124354	A	19920623	US 1990-536135	19900611
	JP 03063213	A2	19910319	JP 1990-156573	19900614
PRAI	GB 1989-13708		19890614		
OS	MARPAT 115:78609				
GI					



I

AB A hair growth-stimulating composition comprises the title compds. (I; R1-R4 = H, OH, OCnH2n+1, NO2, Cl, Br, F, CHO; R5, R6 = H, CN, CO2H, CONH2, CSNH2; R7 = H, OH; n = 1-8) at the amount being sufficient to increase the hair growth by $\geq 10\%$ in the rat, when the composition is applied topically thereto for ≤ 3 mo. I inhibit the activity of protein tyrosine kinase. A cream for the treatment of baldness contained I (R1 = R2 = OH, R3 = OMe, R4 = R7 = H, R5 = R6 = CN) 2, ethoxylated cetyl alc. 4, cetyl alc. 4, mineral oil 4, triethanolamine 0.75, butane-1,3-diol 3, xanthan gum 0.3, preservatives 0.4, perfumes q.s., and water to 100.permill..

IC ICM A61K007-06
 ICS A61K007-48

CC 62-3 (Essential Oils and Cosmetics)

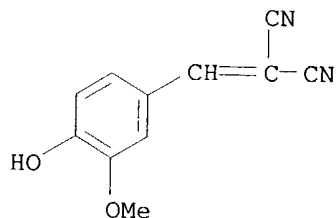
ST hair growth stimulant phenylethylene deriv

IT Alopecia
 (treatment of, phenylethylene derivs. for)

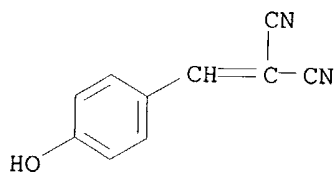
IT Hair preparations
 (growth stimulants, phenylethylene derivs. in, as protein tyrosine kinase inhibitors)

IT 331-39-5 1519-55-7 3696-12-6 3785-90-8 7255-96-1
 7400-08-0 17449-03-5 28166-41-8 72791-61-8
 82575-52-8 118409-54-4 118409-55-5 118409-56-6
 118409-57-7 118409-58-8 118409-59-9
 118409-60-2 118409-62-4 118409-63-5 118409-64-6
 118409-65-7 118409-66-8 118409-67-9 118409-68-0
 RL: BIOL (Biological study)

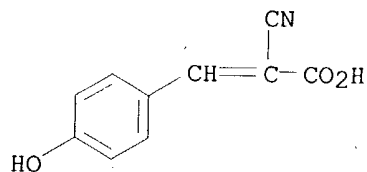
(hair growth-stimulating compns. containing)
 IT 38304-91-5, Minoxidil
 RL: BIOL (Biological study)
 (hair growth-stimulating compns. containing phenylethylene derivs. and)
 IT 80449-02-1, Protein tyrosine kinase
 RL: USES (Uses)
 (inhibitors, phenylethylene derivs. as, hair growth-stimulating compns. containing)
 IT 3696-12-6 3785-90-8 28166-41-8
 72791-61-8 118409-54-4 118409-56-6
 118409-57-7 118409-58-8 118409-59-9
 118409-60-2 118409-67-9
 RL: BIOL (Biological study)
 (hair growth-stimulating compns. containing)
 RN 3696-12-6 HCAPLUS
 CN Propanedinitrile, [(4-hydroxy-3-methoxyphenyl)methylene]- (9CI) (CA INDEX NAME)



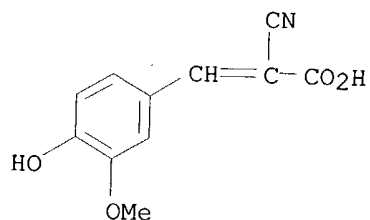
RN 3785-90-8 HCAPLUS
 CN Propanedinitrile, [(4-hydroxyphenyl)methylene]- (9CI) (CA INDEX NAME)



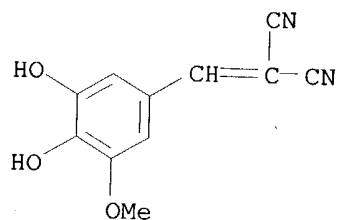
RN 28166-41-8 HCAPLUS
 CN 2-Propenoic acid, 2-cyano-3-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)



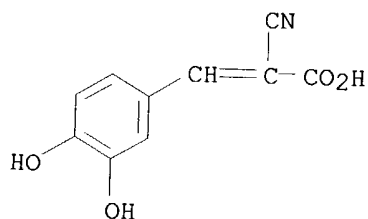
RN 72791-61-8 HCAPLUS
 CN 2-Propenoic acid, 2-cyano-3-(4-hydroxy-3-methoxyphenyl)- (9CI) (CA INDEX NAME)



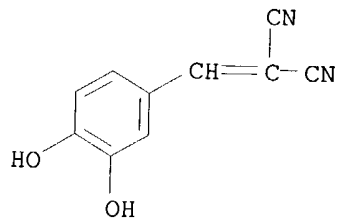
RN 118409-54-4 HCAPLUS
 CN Propanedinitrile, [(3,4-dihydroxy-5-methoxyphenyl)methylene]- (9CI) (CA INDEX NAME)



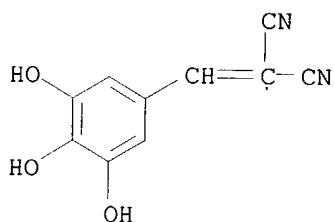
RN 118409-56-6 HCAPLUS
 CN 2-Propenoic acid, 2-cyano-3-(3,4-dihydroxyphenyl)- (9CI) (CA INDEX NAME)



RN 118409-57-7 HCAPLUS
 CN Propanedinitrile, [(3,4-dihydroxyphenyl)methylene]- (9CI) (CA INDEX NAME)

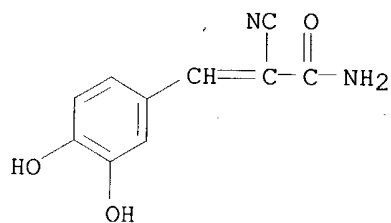


RN 118409-58-8 HCAPLUS
 CN Propanedinitrile, [(3,4,5-trihydroxyphenyl)methylene]- (9CI) (CA INDEX NAME)



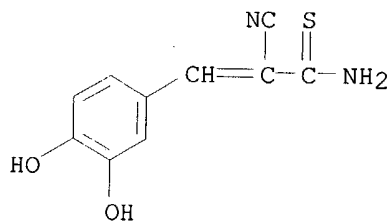
RN 118409-59-9 HCAPLUS

CN 2-Propenamide, 2-cyano-3-(3,4-dihydroxyphenyl)- (9CI) (CA INDEX NAME)



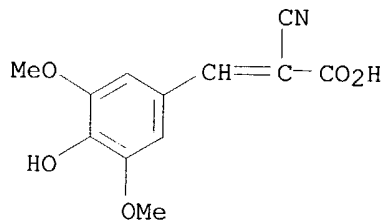
RN 118409-60-2 HCAPLUS

CN 2-Propenethioamide, 2-cyano-3-(3,4-dihydroxyphenyl)- (9CI) (CA INDEX NAME)



RN 118409-67-9 HCAPLUS

CN 2-Propenoic acid, 2-cyano-3-(4-hydroxy-3,5-dimethoxyphenyl)- (9CI) (CA INDEX NAME)



L76 ANSWER 18 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1991:241329 HCAPLUS

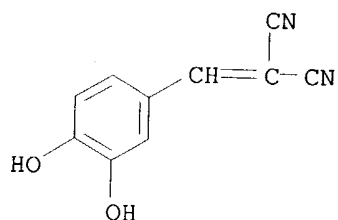
DN 114:241329

TI The inhibition of EGF-dependent proliferation of keratinocytes by

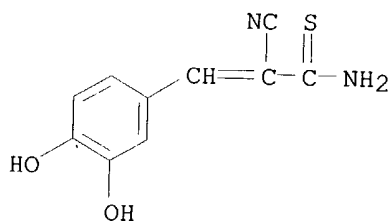
KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

- tyrphostin tyrosine kinase blockers
- AU Dvir, Arik; Milner, Yoram; Chomsky, Orna; Gilon, Chaim; Gazit, Aviv; Levitzki, Alexander
- CS Dep. Biol. Chem., Hebrew Univ., Jerusalem, 91904, Israel
- SO Journal of Cell Biology (1991), 113(4), 857-65
CODEN: JCLBA3; ISSN: 0021-9525
- DT Journal
- LA English
- AB Protein tyrosine kinase blockers of the tyrphostin family inhibited the EGF-dependent proliferation of human and guinea pig keratinocytes grown in culture and induced their growth arrest. These blockers also inhibited the growth of epidermal keratinocytes, but not of dermal cells, in whole skin organ culture from both guinea pig and human origin. The antiproliferative activity of these tyrphostins correlated quant. with their potency as inhibitors of EGF receptor autophosphorylation and the EGF-dependent protein phosphorylation of intracellular target proteins in the keratinocyte. Furthermore, no cell cytotoxicity or reduction in serine and threonine phosphorylation of many intracellular polypeptides were observed upon incubation of the cells with tyrphostins like AG213. The complete growth arrest induced by the tyrphostins is fully reversible and upon their removal the keratinocytes resumed their growth with the original growth rate. Because of the nontoxic nature of these compds. and their growth-arresting properties, their use as agents to treat hyperproliferative conditions of human skin is suggested.
- CC 2-10 (Mammalian Hormones)
Section cross-reference(s): 1
- ST EGF keratinocyte proliferation tyrosine kinase blocker; tyrphostin tyrosine kinase EGF keratinocyte
- IT Receptors
RL: BIOL (Biological study)
(autophosphorylation of, EGF induction of, in keratinocyte of human and laboratory animal, tyrphostin tyrosine kinase blockers inhibition of)
- IT Cell division
(by keratinocyte, from human and laboratory animal, EGF induction of, tyrphostin tyrosine kinase blocker inhibition of)
- IT Phosphoproteins
RL: BIOL (Biological study)
(phosphorylation of, EGF induction of, in keratinocyte of human and laboratory animal, tyrphostin tyrosine kinase blockers inhibition of)
- IT Phosphorylation, biological
(auto-, of EGF receptors, tyrphostin effect on, keratinocyte proliferation in human and laboratory animal in relation to)
- IT Skin
(keratinocyte, proliferation of, of human and laboratory animal, EGF induction of, tyrphostin tyrosine kinase blockers inhibition of)
- IT Cytotoxic agents
(tyrphostins, keratinocyte proliferation stimulation by EGF inhibition by, from human and laboratory animal)
- IT 118409-57-7 118409-60-2 134036-52-5
134036-53-6
RL: BIOL (Biological study)
(keratinocyte proliferation stimulation by EGF inhibition by, from human and laboratory animal)
- IT 62229-50-9, EGF
RL: BIOL (Biological study)
(keratinocyte proliferation stimulation by, from human and laboratory animal in culture, tyrphostin tyrosine kinase blockers inhibition of)
- IT 80449-02-1, Tyrosine kinase
RL: BIOL (Biological study)

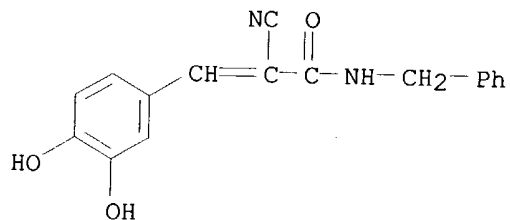
(tryphostin blockers of, EGF-induced keratinocyte proliferation inhibition by, from human and laboratory animal)
 IT 79079-06-4, EGF receptor tyrosine kinase
 RL: BIOL (Biological study)
 (tryphostin inhibition of, keratinocyte proliferation response to EGF in human and laboratory animal in relation to)
 IT 118409-57-7 118409-60-2 134036-52-5
 RL: BIOL (Biological study)
 (**keratinocyte** proliferation stimulation by EGF inhibition by, from human and laboratory animal)
 RN 118409-57-7 HCAPLUS
 CN Propanedinitrile, [(3,4-dihydroxyphenyl)methylene]- (9CI) (CA INDEX NAME)



RN 118409-60-2 HCAPLUS
 CN 2-Propenethioamide, 2-cyano-3-(3,4-dihydroxyphenyl)- (9CI) (CA INDEX NAME)



RN 134036-52-5 HCAPLUS
 CN 2-Propenamide, 2-cyano-3-(3,4-dihydroxyphenyl)-N-(phenylmethyl)- (9CI) (CA INDEX NAME)



=>